

Charles H. Dyson School of Applied Economics and Management
SC Johnson College of Business
College of Agriculture and Life Sciences
Cornell University
439 Warren Hall
Ithaca, NY 14853-7801
Born: 7/29/1981

ao332@cornell.edu
607.255.0220 (office)

EDUCATION

- Ph.D. Agricultural and Resource Economics, University of Maryland, College Park, 2013
Dissertation: *Essays on Climate Change Impacts and Adaptation on Agriculture*
Committee: R.E. Just, R.G. Chambers, M. Cropper, T. McConnell and R. Williams III
- M.S. Agricultural and Resource Economics, University of Maryland, College Park, 2011
- M.P.A. Maxwell School of Citizenship and Public Affairs, Syracuse University, 2006
- M.Sc.Eng. *Diplôme d'ingénieur*, Institut National Agronomique Paris-Grignon, France, 2004
- B.S. Life Sciences (*Diplôme d'études universitaires générales*), Université Paris-Sud, France, 2001

FIELDS OF INTEREST

Climate change impacts and adaptation, agricultural economics, environmental and resource economics, applied econometrics

APPOINTMENTS

Assistant Professor and CoBank/Farm Credit East Sesquicentennial Faculty Fellow in Economics and Management of Agricultural Production Sustainability, 7/2014–, Dyson School of Applied Economics and Management, Cornell University, Ithaca, NY

Fellow, 7/2013–6/2014, Resources for the Future, Washington, DC

Short Term Consultant, 7/2012–7/2013, World Bank, Development Research Group: Environment & Energy Team (DECEE), Washington, DC

Special assistant to the Minister, 7/2006–8/2008, Ministry of the Environment and Natural Resources, Santo Domingo, Dominican Republic

PUBLICATIONS

- Addoum, J., D. Ng and **A. Ortiz-Bobea**, "[Temperature Shocks and Establishment Sales](#)," *Review of Financial Studies* (2019). Forthcoming.
- **Ortiz-Bobea, A.**, "[The Role of Nonfarm Influences in Ricardian Estimates of Climate Change Impacts on U.S. Agriculture](#)," *American Journal of Agricultural Economics* (2019)
- **Ortiz-Bobea, A.**, H. Wang, C. Carrillo and T.R. Ault, "[Unpacking the climatic drivers of U.S. agricultural yields](#)", *Environmental Research Letters* 14:6 (2019)
- H. Wang and **A. Ortiz-Bobea**, "[Market-Driven Corn Monoculture in the US Midwest](#)," *Agricultural and Resource Economics Review* (2019) 1–23.
- **Ortiz-Bobea, A.**, E. Knippenberg and R.G. Chambers, "[Growing Climatic Sensitivity of US Agriculture Linked to Technological Change and Regional Specialization](#)," *Science Advances* 4:12 (2018)

- **Ortiz-Bobea, A.** and J. Tack, "[Is Another Genetic Revolution Needed to Offset Climate Change Impacts for US Maize Yields?](#)," *Environmental Research Letters* 13:12 (2018)
- Gammans, M., P. Mérel and **A. Ortiz-Bobea**, "[The Impact of Climate Change on Cereal Yields: Statistical Evidence from France](#)," *Environmental Research Letters* 12:5 (2017)
- Strand, J., R.T. Carson, S. Navrud, **A. Ortiz-Bobea** and J.R. Vincent, "[Using the Delphi method to value protection of the Amazon rainforest](#)," *Ecological Economics* 131 (2017) 475–484
- **Ortiz-Bobea, A.** and R.E. Just, "[Modeling the Structure of Adaptation in Climate Change Impact Assessment for Agriculture](#)," *American Journal of Agricultural Economics* 95:2 (2013) 244–251

WORKING PAPERS

1. Double cropping will not offset the negative impacts of climate change on US crop yields (with Mathew Gammans and Pierre Mérel), *draft version*
2. How weather affects the decomposition of Total Factor Productivity in U.S. agriculture (with Alejandro Plastina and Sergio Lence), *under review*
3. [How big is the 'lemons' problem? Historical evidence from French appellation wines](#) (with Pierre Merél and Emmanuel Paroissien), *under review*
4. Temperature and children's Nutrition: evidence from West Africa (with Sylvia Blom and John Hoddinott), *under review*
5. Temperature shocks and industry earnings news (with Jawad Addoum and David Ng), *draft version (award-winning paper)*
6. Chlorophyll Fluorescence Improves Satellite-Based Crop Yield Estimation in Diverse Agricultural Landscapes (with Yangyang Fan, Jiaming Wen, Oz Kira, Andrew McDonald, Christopher B. Barrett, Yanyan Liu, Liangzhi You, Zhengjun Qiu, Cong Wang and Ying Sun), *under review*
7. Climate resilience and economic composition (with Zhiyun Li), *draft version*
8. Climate change, extreme temperature and crop yields: unpacking a complex relationship (with Jeffrey Melkonian, Susan Riha and Samantha Sekar), *revision requested*
9. [The Economic Impacts of Climate Change on Agriculture: Accounting for Time-invariant Unobservables in the Hedonic Approach](#)

SELECT WORK IN PROGRESS

1. Price discovery in US cropland rents (with Jesse Tack and Mykel Taylor)
2. Are yields slowing down due to recent climate trends? Evidence from a farm-level panel in France (with Simone Pieralli)
3. Extreme temperature and measurement error (with Shun Chonabayashi)
4. The recent impacts of anthropogenic climate change on global agricultural production (with Toby Ault, Carlos Carrillo, Robert Chambers and David Lobell)
5. Extreme temperature and trade (with Ivan Rudik and Gary Lyn)
6. Aggregation bias in panel estimates of climate change impacts
7. Crop failure in US agriculture

BOOK CHAPTERS

1. **Ortiz-Bobea, A.** "[US Maize Yield Growth and Countervailing Climate Change Impacts](#)." In *Climate Smart Agriculture*, pp. 161-172. Springer, Cham, 2018.
2. Jessoe, K., P. Mérel, and **A. Ortiz-Bobea**. 2018. "[Climate Change and California Agriculture](#)." Chapter 16 in P.L. Martin, R.E. Goodhue, and B.D. Wright (eds). *California Agriculture: Dimensions and Issues*. Giannini Foundation Information Series No. 18-01. Berkeley: University of California: Giannini Foundation and Division of Agriculture and Natural Resources.

TEACHING

AEM 7010, Applied Microeconomics, Fall 2014 (12 students)
AEM 2500, Environmental and Resource Economics, Spring 2015 (48 students)
AEM 7010, Applied Microeconomics, Fall 2015 (9 students)
AEM 2500, Environmental and Resource Economics, Fall 2015 (49 students)
AEM 7010, Applied Microeconomics, Fall 2016 (11 students)
AEM 2500, Environmental and Resource Economics, Fall 2016 (51 students)
AEM 7010, Applied Microeconomics, Fall 2017 (13 students)
AEM 2500, Environmental and Resource Economics, Fall 2017 (60 students)
AEM 7010, Applied Microeconomics, Fall 2018 (24 students)
AEM 2500, Environmental and Resource Economics, Fall 2018 (72 students)
AEM 6850, Empirical Methods for Applied Economists, Spring 2019 (18 students)
AEM 7675, Advanced Grad Research Seminar, Spring 2019 (34 students)
AEM 2500, Environmental and Resource Economics, Fall 2019 (48+47 students)
AEM 7010, Applied Microeconomics, Fall 2019 (9 students)

SERVICE

Department:

Theory competency committee, Applied Economics and Management PhD program, 2014-
MS admissions committee, Applied Economics and Management, 2014-2018

University:

Advisory board member, Cornell Institute for Climate Smart Solutions, 2016-
Member, Food Security Working Group, Atkinson Center for a Sustainable Future, 2018-
Faculty adviser, Diversity in Cornell Economics (DICE) graduate student group 2019-

External:

Associate Editor, American Journal of Agricultural Economics, 2020-2023
Member, OECD Network on Agricultural TFP and the Environment, 2019-

EARLY EXPERIENCE

Research Assistant (part-time), Fall 2008–Spring 2010, Summer 2012, Department of
Agricultural and Resource Economics, University of Maryland, College Park, MD. Professors
Anna Alberini, Richard E. Just, Lars Olson, Rob Williams III and Robert G. Chambers.

Research Intern (full-time), Summer 2003, Agro-ecosystem Management Program, Ohio
State University, Wooster, OH. Researched the physical factors influencing agricultural pollution
in local watershed.

Field Researcher (full-time), 3/2004–8/2004. Research conducted in rural Kafa Zone,
Ethiopia for Engineering Master's thesis. Involved extensive technical interviews with
smallholder farmers. Conducted agro-ecological and agro-economic diagnosis of a small rural
region. Surveyed, analyzed and created models of farming systems. Conducted household-level
food security assessment. Developed project and policy proposals for the Government and NGOs.

HONORS & AWARDS

- Christophe Baron Prize for “How big is the “lemons” problem? Historical evidence from French appellation wines,” at the 13th Annual American Association of Wine Economists, Vienna, Austria, 2019 (paper presented by P Mérel)
- International Center for Pension Management (IPCM) 2018 Research Award for “Temperature Shocks and Earnings News,” 2018
- Geneva Summit on Sustainable Finance (GSSF) 2018 Best Paper Award, “Temperature Shocks and Earnings News,” 2018

- Finalist, World Bank Big Data Innovation Challenge, 2017 (see [here](#))
- University of Maryland Distinguished Dissertation Award (Social Sciences), 2014, recognizes original work that makes an unusually significant contribution to the discipline
- Admitted to Young Professionals Program, World Bank, 2013 (declined to pursue research career)
- Dr. and Mrs. Bill V. Lessley Award for Dissertation Excellence, 2013, awarded to the author of the best dissertation in the Department of Agricultural & Resource Economics, University of Maryland
- International Conference Student Support Award, 2013, University of Maryland's Office of the President and the Graduate School
- Distinguished Teaching Assistant Award, 2011–2012, University of Maryland's Center for Teaching Excellence and the Graduate School
- Jacob K. Goldhaber Travel Grant, 2012, University of Maryland's Graduate School
- Grant from the European Association of Environmental and Resource Economists (EAERE) to participate in the Belpasso International Summer School "Extremes: Natural Disasters in Changing Climate", 4-10 September 2011, Belpasso, Italy
- Distinguished Teaching Assistant Award, 2010–2011, University of Maryland's Center for Teaching Excellence and the Graduate School
- The Bessie H. Devault Award, 2010, awarded to the author of the best paper by a second-year graduate student in the Department of Agricultural & Resource Economics, University of Maryland.
- Syracuse University Graduate Fellow, 2005–2006

GRANTS

1. National Science Foundation, project 1360424. "Impacts of Climate Change on the Phenology of Linked Agriculture-Water Systems." Collaborative Research with 7 co-PIs at 3 other institutions; Total award amount: \$1.8M. Award amount managed by AOB: \$330,000 approx. Period: 2014-2018.
2. Cornell Institute for Social Science (ISS) small grant. Title: "Can public institutions resolve information asymmetries? Historical evidence from the French wine market." Award amount: \$10,000. Period: 2014-2015.
3. USDA National Institute of Food and Agriculture, Hatch/Multi State project 101155 "Impact Analysis and Decision Strategies for Agricultural Research". Award amount: \$137,500. 2016-2021
4. USDA National Institute of Food and Agriculture, Hatch project 1017421 "A Near Real-Time Crop Yield Forecasting System for the Eastern United States". Award amount: \$105,000. 2018-2021
5. USDA National Institute of Food and Agriculture, INFIEWS project 1855984 "Agricultural-to-Energy Land Use Transitions: A FEW System Modeling Framework". Research with 5 other co-PIs. Total award amount: \$2.4M. Award amount managed by AOB: \$350,000 approx. Period: 2019-2021.
6. USDA cooperative agreement 58-6000-9-0041 "Development of an Empirical Multi-Scale Agricultural Forecast Model", Award amount: \$16,193. Period: 2020.

CONFERENCES AND SEMINARS (past and scheduled)

1. "Improving Agronomic Structure in Econometric Models of Climate Change Impacts," paper presented at the AAEA & NAREA Joint Annual Meeting, Pittsburgh, July 24–26 2011.
2. "Toward More Transparency in Climate Change Impact Assessment for Agriculture" (with Richard E. Just), paper presented at the 2012 AAEA's session' on "Assessment of Climate Change Impact Methods for Agriculture," ASSA meetings, Chicago, Illinois, January 6, 2012.
3. "Moisture and Heat Interactions in Yield Response Models," paper presented at the AERE Annual Meeting, Asheville, North Carolina, June 3-5, 2012.
4. "A Biophysical Framework for Time-Aggregation of Weather in Yield Response Models," poster presented at the AAEA Annual Meeting, Seattle, Washington, August 12-14, 2012.
5. "Understanding Heat and Moisture Interactions in the Economics of Climate Change Impacts and Adaptation on Agriculture," paper presented at the AERE Annual Meeting, Banff, Ontario, Canada,

- June 3-5, 2013.
6. "Unpacking Temperature and Moisture Effects on US Corn Yields for Climate Change Impact Assessment," paper presented at the AAEA Annual Meeting, Washington, DC, August 4-6, 2013
 7. "Climatic Constraints of US Growing Seasons," paper presented at the AAEA Annual Meeting, Minneapolis, MN, July 27-29, 2014.
 8. "Climate Change Impacts on US Agriculture: Accounting for the Option Value of Farmland in the Hedonic Approach," paper presented at the ASSA-AERE meetings, Boston, MA, January 3-5, 2015.
 9. "Climate Change Impacts on US Agriculture: Accounting for the Option Value of Farmland in the Hedonic Approach," paper presented at the AERE Summer Conference, San Diego, CA, June 3-5, 2015.
 10. "Climate Change Impacts on US Agriculture: Accounting for the Option Value of Farmland in the Hedonic Approach," paper presented at the AAEA Summer Conference, San Francisco, CA, July 26-28, 2015.
 11. "Climate Change Impacts on US Agriculture: Accounting for the Option Value of Farmland in the Hedonic Approach," paper presented at the NAREA Summer Conference, Newport, RI, June 28-30, 2015.
 12. "Accounting for Omitted Spatial Dependence in the Hedonic Approach," paper presented at the ASSA-AERE meetings, San Francisco, CA, January 3-5, 2016.
 13. "Measurement Error, Extreme Temperature and Climate Change Impacts," paper presented at the AAEA Summer Conference, Boston, MA, July 31-August 2, 2016.
 14. Purdue (Agricultural Economics), West Lafayette, IN, February 17, 2017
 15. USDA Multi-state Research Project NC-1034 "Impact Analyses and Decision Strategies for Agricultural Research" annual research conference on Food, Energy, Environment, and Economics, Tucson, AZ, February 24-25, 2017
 16. Workshop "Advances in Estimating Economic Effects from Climate Change Using Weather Observations" organized by Charles Kolstad and Frances Moore, Stanford, CA, May 18-19, 2017
 17. AERE summer meetings. Pittsburgh, PA, June 2, 2017
 18. USDA ERS. Washington, DC, June 7, 2017
 19. EPA NCEE. Washington, DC, June 8, 2017
 20. Northeast Workshop on Energy Policy and Environmental Economics, Dartmouth College, Hanover, NH, June 13-14, 2017
 21. "The Economic Impacts of Climate Change on Agriculture: Accounting for Time-invariant Unobservables in the Hedonic Approach," AAEA summer meetings. Chicago, IL, July 30-August 1, 2017
 22. "U.S. maize Yield Growth and Countervailing Climate Change Impacts," AAEA summer meetings. Chicago, IL, July 30-August 1, 2017
 23. "The Role of Climate in U.S. Agricultural Productivity Growth," AAEA summer meetings. Chicago, IL, July 30-August 1, 2017
 24. Kansas State University (Ag Econ), Spring 2018
 25. ICARB Pre-conference workshop multi-state project NC-1034, The World Bank, June 12, 2018, Washington, DC
 26. AERE summer meetings. Lake Tahoe, NV, May 2019
 27. AAEA summer meetings. Atlanta, GA, July 2019
 28. Panelist, Heartland Environmental and Resource Economics Workshop at Illinois, September 2019
 29. OECD Network on Agricultural Total Factor Productivity and the Environment, University of Maryland, College Park, MD, October 2019
 30. Arizona State University (SPGS), Tempe, AZ, December 2019
 31. University of Arizona, Tucson, AZ, December 2019
 32. Big Ag Data Conference 2020, UC Giannini Foundation of Agricultural Economics, Davis, CA, January 11, 2020
 33. TREE seminar at NC State/Duke/RTI, Durham, NC, March 2020
 34. University of Connecticut (ARE), Storrs, CT, April 2020
 35. Virginia Tech (AAEC), Blacksburg, VA, April 2020
 36. State University of New York (Economics), Albany, NY, April 2020

NON-RESEARCH TALKS

- Panelist, “Cross-cultural communication with practiced presenters”, part of a student-organized symposium “Speaking Economics”. August 19, 2019 in Ithaca, NY.

PROFESSIONAL ORGANIZATIONS

American Economic Association (AEA), 2013-
Agricultural and Applied Economics Association (AAEA), 2009-
Association of Environmental and Resource Economists (AERE), 2010-
European Association of Environmental and Resource Economists (EAERE), 2011
Northeastern Agricultural and Resource Economics Association (NAREA), 2012, 2015-

Referee activities:

American Journal of Agricultural Economics
Agricultural and Resource Economics Review
Climate Change Economics
Climatic Change
Environmental and Resource Economics
Environmental Research Letters
Food Policy
Journal of Agricultural and Applied Economics
Journal of Agricultural and Resource Economics
Journal of the Association of Environmental and Resource Economists
Journal of Environmental Economics and Management
Journal of the European Economic Association
Latin American Economic Review
Nature Climate Change
Proceedings of the National Academy of Sciences
Quantitative Economics
Resource and Energy Economics
Review of Financial Studies
Science Advances

Invited editor: *Proceedings of the National Academy of Sciences*

External reviews, grant & panel reviews:

NSF Decision, Risk, and Management Sciences program, 2015
USDA AFRI Environmental and Natural Resource Economics Program, 2016
European Research Council (ERC) Starting Grant, 2017

GRADUATE STUDENTS

Postdocs

- Haoying Wang; Assistant Professor at New Mexico Tech

PhD students

- Xiaolu (Grace) Li, 2019 (Earth and Atmospheric Sciences)

- David Frederick Gold (Civil and Environmental Engineering)
- Steven Wilcox (Applied Economics)
- Sylvia Blom (Applied Economics)
- Zhiyun Li (Chairperson) (Applied Economics)

MS students

- Qingrun (Justin) Meng, 2017 (Chairperson); Analyst, Analysis Group, Boston
- Elizabeth Womack, 2017; Survey Statistician, US Census Bureau
- Linghui Wu, 2017; PhD Student, University of New Hampshire
- Matthew Utterback, 2018 (Chairperson); Economist, Transportation Security Administration
Selected second-place winner of the Master's category of the 2018 ICPSR Research Paper Competition
"Investigating Weather Shocks and the Farmers' Perceptions of Climate Change in the American Farmland Market."
- Lin Yang; PhD student in Applied Economics, Cornell University
- Ithipong (Billy) Assaranurak (Chairperson), 2019; Data Scientist, Government Big Data Institute of Thailand
- Sangwoo Park, 2020 (Chairperson)
- Jiajun Du, 2020
- Samuel Porter, 2021 (Chairperson)

LANGUAGES

Spanish (native); French (fluent); English (fluent)