

DIANE CHARLTON

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EDUCATION

University of California, Davis

Ph.D., Agricultural & Resource Economics (July 2016)

- Dissertation Committee: J. Edward Taylor (chair), Katrina Jessoe, Giovanni Peri, and Aaron Smith
- Fields: Agricultural Economics, Economic Development, and Public Economics

University of California, Berkeley

B.A., Economics (2007)

Pontificia Universidad Católica de Chile

Full immersion University of California study abroad (Spring 2007)

EMPLOYMENT

Associate Professor of Agricultural Economics, Montana State University (2023-present)

Assistant Professor of Agricultural Economics, Montana State University (2016-2023)

PROFESSIONAL ASSOCIATIONS

Associate Editor for the *American Journal of Agricultural Economics* (2021-present)

Associate Editor for the *European Review of Agricultural Economics* (2022-present)

Member of the Agricultural & Applied Economics Association, American Economic Association, International Association of Agricultural Economists, Western Agricultural Economics Association

JOURNAL PUBLICATIONS

Marcelo Castillo and Diane Charlton. 2022. "Housing Booms and H-2A Agricultural Guest Worker Employment" *American Journal of Agricultural Economics*

Diane Charlton, Alexander James, and Brock Smith. 2021. "Seasonal Farm Labor and Criminal Activity in the United States" *American Journal of Agricultural Economics* 104(2): 530-549.

Diane Charlton. 2021. "Seasonal Farm Labor and Risk of COVID-19 Spread" *Applied Economic Perspectives & Policy* 44(3): 1591-1609.

Diane Charlton and Marcelo Castillo. 2021. "Potential Impacts of a Pandemic on the U.S. Farm Labor Market" *Applied Economic Perspectives and Policy* 43(1): 39-57

Diane Charlton and Genti Kostandini. 2020. "Can Technology Compensate for a Labor Shortage? Effects of 287(g) Immigration Policies on the U.S. Dairy Industry" *American Journal of Agricultural Economics* 103(1): 70-89.

Diane Charlton and J. Edward Taylor. 2020. "Rural School Access and the Agricultural Transformation" *Agricultural Economics* 51(5): 641-654.

Charlton, Diane, J. Edward Taylor, Stavros Vougioukas, and Zachariah Rutledge. 2019 (2nd Quarter). "Can Wages Rise Quickly Enough to Keep Workers in the Fields?" *Choices*. 34 (2).

Charlton, Diane, J. Edward Taylor, Stavros Vougioukas, and Zachariah Rutledge. 2019 (2nd Quarter). "Innovations for a Shrinking Agricultural Workforce." *Choices*. 34 (2).

Charlton, Diane and J. Edward Taylor. 2016. "A Declining Farm Workforce: Analysis of Panel Data from Rural Mexico." *American Journal of Agricultural Economics*. 98 (4): 1158-1180.

Taylor, J. Edward, Diane Charlton, and Antonio Yúnez-Naude. 2012. "The End of Farm Labor Abundance." *Applied Economic Perspectives and Policy*. 34 (4): 587-598.

BOOKS & CHAPTERS

Diane Charlton, Zachariah Rutledge, and J. Edward Taylor. 2021. "The Changing Nature of Agricultural Labor Markets" *Handbook of Agricultural Economics*, volume 5. Eds. Chris Barrett and David Just.

J. Edward Taylor and Diane Charlton. 2018. *The Farm Labor Problem: A Global Perspective*. Amsterdam: Elsevier Academic Press.

WORKING PAPERS

Diane Charlton, Alexandra E. Hill, and J. Edward Taylor. 2022. "Automation and Social Impacts: Winners and Losers" Background paper for the UN Food and Agricultural Organization State of Food and Agriculture working paper series.

Diane Charlton, Genti Kostandini, Tianyuan Luo. "Immigration Policy and Labor Contractors: Evidence from 287(g) and Farm Labor Markets"

Diane Charlton. 2023. "The Political Economy of Farm Labor and Guest Worker Policy" presented at the Agricultural & Applied Economics Association meetings in Washington, D.C. (July 25, 2023)

WORKING PROJECTS

"Effects of Global Trade Policies on Rural Labor Markets" with Amanda Countryman and Dale Manning

"H-2A Guest Worker Demand Response to Local Changes in Incidence of COVID-19" with Skyler Simnitt and Marcelo Castillo

HONORS AND AWARDS

Agricultural & Applied Economics Association Quality of Research Discovery Award, Honorable Mention for "A Declining Farm Workforce: Analysis of Panel Data from Rural Mexico" with J. Edward Taylor (2017)

UC Davis Agricultural & Resource Economics Best Dissertation and Gordon A. King Award (2016)

First Winter School on the Analytics and Policy Design of Migration, taught by Dr. Oded Stark, Georgetown University's School of Foreign Service in Qatar (2014)

Agricultural & Applied Economics Association Outstanding *Applied Economics Perspectives and Policy* article, Honorable Mention for "The End of Farm Labor Abundance" with J. Edward Taylor and Antonio Yúnez-Naude (2013)

Agricultural Innovation Partnership scholarship for participation in Cornell University's course in International Agriculture & Rural Development, Maharashtra, India (2012-2013)

GRANTS

USDA National Institute for Food and Agriculture (NIFA) Agriculture and Food Research Initiative (AFRI) for "Effects of Trade Policy on Rural Employment and Wages" (2023-2026)

USDA Economic Research Service Cooperative Agreement for “COVID-19, Farm Labor, and Risk Management” (2020-2022)

USDA National Institute for Food and Agriculture (NIFA) National Robotics Initiative for economic analysis in “Tree Fruit Harvesting with Arrays of Vision-Guided Linear Robot Arms” (2019-2022)

USDA Economic Research Service Cooperative Agreement for “H-2A Program Growth: The Role of Wages, Unemployment Rates, and Labor Recruiting Firms” (2018-2020)

UC Davis Provost’s Dissertation Year Fellowship in the Arts, Humanities and Social Sciences (2015-2016)

UC Davis, College of Agricultural and Environmental Sciences, Henry A. Jastro Research Award (2012-2013 and 2014-2015)

Giannini Foundation research grant with J. Edward Taylor and Antonio Yúnez-Naude (2013-2014)

UC Davis Center for Poverty Research grant with Scott Carrell (2012)

UC Davis Center for Poverty Research grant with J. Edward Taylor and Philip Martin (2012)

CONFERENCES AND INVITED PRESENTATIONS

“The Political Economy of Farm Labor and Guest Worker Policy” Agricultural & Applied Economics Association Annual meetings, Washington, D.C. (July 25, 2023)

“Rome Dialogue II: Closing the Agricultural Labor Gap: Decent Migrant Work or Automation?” Hybrid Event hosted by the World Bank in Rome (June 7, 2023)

“Agricultural Labor, Immigration, and Innovation” FRIES Seminar, ETH Zurich (May 25, 2023)

“Effects of Trade Policy on Rural Employment and Wages” Seminar, University of Illinois, Department of Agricultural & Consumer Economics, Urbana, IL (October 7, 2022)

“Future Prospects of Farm Labor” Board on Agricultural and Natural Resources (BANR) National Academies of Sciences, Engineering, and Medicine meeting, Washington State University, Richland, WA (September 7, 2022)

“The Role of Farm Labor Contractors in Tight Labor Markets: Evidence from 287(g) Policies” Agricultural Labor Online Working Group Series. Hosted by Department of Environmental Systems Science, ETH-Zürich (September 13, 2022)

“The Role of Farm Labor Contractors in Tight Labor Markets: Evidence from 287(g) Policies” MSU Applied Economics Conference, Montana State University (June 21, 2022)

“The Role of Farm Labor Contractors in Tight Labor Markets: Evidence from 287(g) Policies” Online Agricultural and Resource Economics Seminar (#OARES), online (April 29, 2022)

“Seasonal Farm Employment, COVID-19, and H-2A Demand” USDA Economic Research Service research seminar, Kansas City (May 25, 2022)

“Farm Labor and Immigration” 2022 Agricultural Symposium: Help Wanted in Agriculture, Kansas City (May 23, 2022)

“Effects of Trade Policy on Rural Employment and Wages” Seminar, University of Minnesota, Department of Applied Economics, St. Paul (March 25, 2022)

“The Farm Workforce: Essential But Diminishing” UC Davis Global Migration Center for Poverty and Inequality workshop on California’s Post Pandemic Recovery: Policies and Unique Challenges for Vulnerable Populations, online workshop (March 11, 2022)

“Housing Booms and H-2A Agricultural Guest Worker Employment” 2021 International Conference of Agricultural Economics, Online (August 27, 2021)

“Seasonal Agricultural Activity and Crime” Seminar, Kansas State University, Department of Agricultural

Economics, Online (February 25, 2021)

“Potential Impacts of a Pandemic on the U.S. Farm Labor Market” 2021 American Social Sciences Association Annual Meeting, Online (January 3, 2021)

“The Changing Nature of Agricultural Labor Markets” *Handbook of Agricultural Economics*, volume 5 workshop, Online (October 29, 2020)

“The Farm Labor Problem and Specialty Crop Production” 2020 AAEA Annual Meeting Online Symposium—Specialty Crops Under Siege, Online (September 10, 2020)

“Developments of H-2A in Specialty Crops” 2020 AAEA Annual Meeting Pre-Conference Online Workshop (July 29, 2020)

“Can Technology Adoption Fully Offset Declines in the Farm Labor Supply?” Seminar, Agricultural & Resource Economics, Colorado State University, Fort Collins (February 18, 2020)

“The Impact of Natural Disaster on Women’s Empowerment, Mental Health, and Aspirations: Evidence from the 2015 Nepal Earthquake.” Sustainability and Development Conference, University of Michigan, Ann Arbor (October 14, 2019)

“Does the Seasonal Inflow of Farm Labor Affect Crime Rates?” Seminar, University of Georgia, Department of Agricultural & Applied Economics, Athens (September 18, 2019)

“Agricultural Labor - Issues and Solutions.” Organized Symposium with Ivan Kandilov, Jennifer Ifft, Alexandra Hill, and Timothy Richards, AAEA Annual Meetings, Atlanta (July 22, 2019)

“Development of Agricultural Supply through Structural Changes in Labor Inputs,” *The Future of Work in Agriculture*, The World Bank, Washington, DC (March 19-20, 2019)

“Changing Supply of Labor in the United States and Potential Supply from Mexico,” AAEA Post-Conference Workshop: Convergence of Policy Issues in Produce Research, Washington, DC (August 8, 2018)

“How Agricultural Producers Adjust to a Shrinking Farm Labor Supply,” Selected Presentation, AAEA Annual Meetings, Washington, DC (August 7, 2018)

“Guest Worker Programs in Agriculture: Drivers of Change,” Panel discussant in Organized Symposium, AAEA Annual Meetings, Washington, DC (August 6, 2018)

“The Labor Implications of Robotization On & Off the Fields,” Panel discussant in session titled “The Future of Work in Agriculture”, International Conference of Agricultural Economists, Vancouver, BC (August 2, 2018)

“Can Wages Rise Quickly Enough to Keep Workers in the Fields?” Western Agricultural Economics Association Annual Meetings, Anchorage, AK (June 25, 2018)

“Explaining the Growth in Agricultural Guest Worker Demand,” Western Agricultural Economics Association Annual Meetings, Anchorage, AK (June 25, 2018)

“Education Accelerating the Agricultural Transformation: Panel Data Analysis of Rural Mexico,” AAEA & WAEA Joint Annual Meetings, San Francisco, CA (July 27, 2015)

“Education Accelerating the Agricultural Transformation: Panel Data Analysis of Rural Mexico,” Population Association of America Annual Meetings, San Diego, CA (April 30, 2015)

“A Declining Farm Workforce: Analysis of Panel Data from Rural Mexico,” Seminar at Department of Agricultural and Applied Economics, University of Wyoming, Laramie (May 8, 2015)

“What Explains the Decline in Migration?” Population Association of America Annual Meetings, New Orleans, LA (April 13, 2013)

“The End of Farm Labor Abundance.” Seminario Desarrollo Rural en México: Retos y Políticas, PRECESAM, CEE, y REAP UC Davis (presentation in Spanish), Mexico City, MX (December 10, 2012)

OUTREACH PUBLICATIONS

Charlton, Diane. 2023. "Rome Dialogue II: Closing the Agricultural Labor Gap: Decent Migrant Work or Automation?" Policy Note for the World Bank

Charlton, Diane. June 2020. "50 Percent Unauthorized and 100 Percent Essential: Farm Labor Supply and Demand during the COVID-19 Pandemic." in *Economic Impacts of COVID-19 on Food and Agricultural Markets*. Council for Agricultural Science and Technology (CAST) Commentary QTA2020-3. Task force managers: Jayson Lusk and John D. Anderson.

Zahniser, Steven, J. Edward Taylor, Thomas Hertz, and Diane Charlton. 2018. "Farm Labor Markets in the United States and Mexico Pose Challenges for U.S. Agriculture." *USDA ERS Economic Information Bulletin*. No. 201. (Peer Reviewed)

Taylor, J. Edward and Diane Charlton. 2014. "The End of Farm Labor Abundance Means Longterm Changes for Wine Producers." *Wine Business Monthly*. December.

Charlton, Diane and J. Edward Taylor. 2013. "Mexicans are Leaving Farm Work: What Does it Mean for U.S. Agriculture and Immigration Policy?" *ARE Update*. 16 (4).

Carroll, Christine, Diane Charlton, and Emilia Tjernström. 2012. "Price Premiums for Organic Strawberries." *ARE Update*. 15 (6).

OUTREACH PRESENTATIONS & MEDIA APPEARANCES

"The Future of Agricultural Labor" Montana Seed Potato Meetings (November 3, 2022)

"Agricultural Labor, Immigration, and Innovation" Montana State University Dan Scott Ranch Management Program Seminars, 2022-2023 Issues in Ranching Series (November 1, 2022)

Guest on Montana Ag Live (June 5, 2022)

Guest appearance on CNBC "Here's why food shortages are unlikely to occur in the U.S." hosted by Nathaniel Lee <https://www.cnbc.com/2022/04/20/heres-why-food-shortages-are-unlikely-to-occur-in-the-us.html> (Published April 20, 2022)

"Farm Labor and Immigration" Montana State University Osher Lifelong Learning Institute (OLLI) Lecture Series, Bozeman, MT (April 11, 2022)

"Labor Markets, Immigration, and Innovation" Montana Grain Elevator Association Convention, Great Falls, MT (January 27, 2022)

"What Actually Happens To Crime Rates During Peak Migrant Labor Season?" Interview with *Off-Farm Income: Ideas for the Ultimate Lifestyle Business Agriculture* (December 1, 2021)

Panelist for discussion on farm labor at the Sustainable Agriculture Summit, Las Vegas, NV (November 17, 2021)

"Housing Booms and H-2A Agricultural Guest Worker Employment" Montana State University Fall Economics Conference (November 12, 2021)

"Opportunities and Challenges for California's Agricultural Labor Market: COVID-19, H-2A Workforce, and Mechanization" UC Davis Agricultural and Resource Economics Discussions (November 2, 2021)

"The Farm Labor Problem" Montana State University Freshman Research Symposium (September 25, 2021)

Guest appearance on CBS News Sunday Morning, "Down on the farm: A shortage of agricultural labor" (Aired June 27, 2021)

"Sustaining Agriculture in the Presence of Farm Labor Uncertainty" Virginia Sustainable Farms and Agribusiness Education Webinar Series, Virginia Tech (April 29, 2021)

"Farm Labor Employment and Rising H-2A Guest Worker Demand" Montana State University Agricultural

Economics Conference (March 5, 2021)

“COVID-19 and Labor in the Food Supply Chain” Fall Economics Conference: COVID-19’s Impact on Montana Agriculture. Montana State University, Department of Agricultural Economics & Economics (November 13, 2020)

“Farm Labor and the Coronavirus Pandemic” Montana State University, Snowmester guest lecture (December 15, 2020)

“Farm Labor in Uncertain Times” Montana State University, Department of Agricultural Economics & Economics, Extension Webinar (November 25, 2020)

“The Farm Labor Problem.” Interview/Webinar with K. Aleks Schaefer, JD, PhD and Trey Malone, PhD for *Closing Bell* webinar at Michigan State University. (August 21, 2020)

“Immigration and the Agricultural Workforce.” Interview/Webinar with Mikkel J. Pates for Agweek. (April 29, 2020)

“Immigration and the Agricultural Workforce.” Webinar hosted by Montana State University Agricultural Economics Extension. (April 23, 2020)

Guest for NPR Planet Money “Food and Farmworkers” hosted by Sarah Gonzalez. (Aired March 25, 2020)

“Economics and Common Pool Resources.” Montana FFA meeting. Columbus, MT. (February 25, 2020)

“Montana Labor and Population.” Montana Warehousemen’s Association Meeting, Fairmont, MT. (May 4, 2019)

“The Future of Farm Labor” Montana State University DAEE Fall Conference. *Agriculture and Political Uncertainty*. Bozeman, MT (November 9, 2018)

“Immigration Policies and Trends in the United States” Montana State University Humanitarian Club, Bozeman, MT (April 18, 2018)

“Adjusting to an Era of Fewer Farm Workers” College of Ag Connects, Montana State University, Bozeman, MT. (January 15, 2018)

“Adjusting to an Era of Farm Labor Scarcity: Challenges and Opportunities”

- Pacific Northwest Christmas Tree Association, Trade Show and Tree Fair (September 8, 2017)
- Sustainable Ag Expo, San Luis Obispo, CA (November 14, 2016)
- Hood River Winter Horticulture Meeting, Hood River, OR (February 5, 2016)
- Labor Issues Facing Agriculture & the Rural Midwest, Federal Reserve Bank, Chicago (November 17, 2015)

“The End of Farm Labor Abundance”

- Farm Labor and the ALRA at 40, University of California, Davis (April 17, 2015)
- Agri-business Council of Oregon Annual Meeting, Woodburn, OR (January 22, 2015)
- Presentation to California Department of Food and Agriculture, Advisory Board for the Governor and Secretary of Agriculture, Sacramento, CA (February 4, 2014)
- California League of Food Processors meeting, Monterey, CA (April 9, 2013)
- Western Growers Labor Committee meeting, Sacramento, CA (March 13, 2013)
- California Farm Bureau Federation Leaders Conference, Sacramento, CA (March 12, 2013)

TEACHING

Instructor

- Montana State University, Department of Agricultural Economics & Economics
 - AGBE 445: Agribusiness Management (2017-present)
 - ECNS 317: Economic Development (2019-present)
 - ECNS 301: Intermediate Microeconomics with Calculus (2017-2018)

- Accompanied students in “Agriculture in the Global Context” course to China (2019) and the United Kingdom (2018)
- University of California, Davis, Department of Agricultural & Resource Economics
 - ARE 150: Agricultural Labor (2016)

Teaching Assistant

- University of California, Davis, Department of Agricultural & Resource Economics
 - ARE 150: Agricultural Labor for Dr. J. Edward Taylor (2015)
 - ARE 256A & 256B: Masters Econometrics for Dr. Jim Chalfant (2011-2012)
 - ARE 106: Econometrics for Dr. Richard Green (2010)

PROFESSIONAL & UNIVERSITY SERVICE

Journal Reviews: *Applied Economic Perspectives & Policies, Agricultural Economics, American Economic Journal: Applied, American Journal of Agricultural Economics, California Agriculture, Ecological Economics, European Review of Agricultural Economics, Journal of Agricultural and Resource Economics, Journal of Food Distribution Research, Journal of Rural Social Sciences, Regional Science and Urban Economics, Review of Economics of the Household*

Topic Leader, Agricultural & Applied Economics Association Annual Meetings (2017-2018)

Resident Instruction Committee, Montana State University, Department of Agricultural Economics & Economics, Alternative Certifying Officer (2020-2022), Chair and Certifying Officer (2022-2023)

Instructor for Montana Council on Economic Education (MCEE) summer course for high school teacher continuing education (2021, 2022)

Grant Review Committee, Montana State University, College of Agriculture Minigrant program (2020-2021)

Faculty Reviewer, National Conference on Undergraduate Research (2020)

Faculty Search Committee, Montana State University, Department of Agricultural Economics & Economics (2016-2017, 2018-2019)

Faculty Advisor for the Montana State University Young Farmers & Ranchers Club (2018-present)

College of Agriculture Scholarship Committee, Montana State University (2018-2022)

Undergraduate Scholarship Committee, Montana State University Department of Agricultural Economics & Economics (2018-2022)

Department of Agricultural Economics & Economics Faculty Advisory Committee (2018-2019)

Brownbag Organizer, Department of Agricultural Economic & Economics, Montana State University (2018-2022)

Seminar and Brownbag Series Co-Organizer, Department of Agricultural Economic & Economics, Montana State University (2022-present)

Accompanied AGBE 315 students on Agriculture in the Global Context trips to the United Kingdom (2018) and China (2019)

COMMUNITY INVOLVEMENT

Women’s Dean at 1 week summer camp for foster children, Royal Family Kids Camp, Three Forks, MT (June 2021, 2022)

Received volunteer training from Haven–Haven is a women’s shelter in Bozeman, MT that provides confidential support, legal advocacy, counseling, and a safe place to stay for anyone and everyone impacted by domestic violence, sexual assault, sex trafficking, and stalking (2020)

Moved fence for rotational pasture management–Dorper sheep ranch, Payette, ID (2018)

Wrestled calves and gave vaccinations–Cattle branding, Wilsall, MT (2017, 2018)

Built fence–Cattle ranch, Choteau, MT (2018)

Livestock judging workshop–shadowed former student, Bozeman, MT (2018)

Visited ranches in Buffalo, Big Sandy, Choteau, and Wilsall, MT and Payette, ID (2017, 2018)

Attended Montana Stockgrowers Association Annual Meeting (2018)

Attended Montana Ag Summit Meeting, Great Falls, MT (2017)

Member of Missouri Headwaters Gun Dog Club, Bozeman, MT (2018)

OTHER WORK EXPERIENCE

ERA Economics, Davis, CA (2016)

Adventure Director/Ridges Counselor (back country camp counselor, leading teenagers on backpacking trips and in Bible study), Camp Perkins Lutheran Outdoor Ministries, Sawtooth Mountains, Idaho (2014)

Harvard Kennedy School of Public Policy and Innovations for Poverty Action, Research Assistant (including field work in rural India and office work in Cambridge, MA) to Dr. Michael Kremer, Dr. Ryan Sheely, Dr. Amrita Ahuja, and Dr. Alaka Holla (2009-2010)

ECONorthwest, Research Assistant, Eugene, OR (2008-2009)

White water raft guide, American River Recreation, Coloma, CA (2006, 2007)

Updated 10/8/2023