

Zachariah Rutledge

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Current Employment **Assistant Professor (August 2022 - Current)**
Department of Agricultural, Food, and Resource Economics, Michigan State University

Education

Ph.D. in Agricultural and Resource Economics (2020)
University of California, Davis
Dissertation Title: "From the Farm to the City: How the Changing Supply of Immigrant Workers Impacts the United States" [Link](#)
Committee: Pierre Mérel (chair), J. Edward Taylor, and Giovanni Peri
Fields: Labor, Agriculture, Econometrics, Development

M.S. in Agricultural and Resource Economics (2016)
University of California, Davis

A.B. in Economics (with highest honors) (2015)
University of California, Davis

A.S. in Natural Science (with honors) (2009)
Sierra College

A.A. in Liberal Arts (with honors) (2009)
Sierra College

Publications

Peer-Reviewed Articles

"How Many California Farm Workers: 2018-2021," with Brandon Hooker, Philip Martin, and Marc Stockton. *California Agriculture*. (forthcoming). [Link](#)

"California Ag Employment Rose and Became Less Seasonal Since 1990," with Philip Martin. *California Agriculture*. (2023). [Link](#)

"Food System Labor and Bargaining Power," with Timothy Richards. *Food Policy*, 119. (2023). [Link](#)

"Farm Labor Supply and Fruit and Vegetable Production," with Pierre Mérel. *American Journal of Agricultural Economics*, 105(2): 644-673. (2022). [Link](#)

"Economic Assimilation of Mexicans and Central Americans in the United States," with Giovanni Peri. *IZA Journal of Development and Migration*. (2022). [Link](#)

"The H-2A Program in California," with Philip Martin. *California Agriculture*, 75(3):135-141. (2022). [Link](#)

"Viewpoint: The Future of Work in Agri-Food," with Luc Christiaensen and J. Edward Taylor. *Food Policy*, 99. (2021). [Link](#)

"Can Wages Rise Quickly Enough to Keep Workers in the Fields?" with Diane Charlton, J. Edward Taylor, and Stavros Vougioukas. *Choices*, 34(2). (2019). [Link](#)

"Innovations for a Shrinking Agricultural Workforce," with Diane Charlton, J. Edward Taylor, and Stavros Vougioukas. *Choices*, 34(2). (2019). [Link](#)

Book Chapters

"Economic and Societal Aspects," with J. Edward Taylor. Chapter 10 in S. G. Vougioukas and Q. Zhang (Eds.), *Advanced Automation for Tree Fruit Orchards and Vineyards*. (2023). [Link](#)

"Evolving Agricultural Labor Markets," with Diane Charlton and J. Edward Taylor. Chapter 77 in C. Barrett and D. Just (Eds.), *The Handbook of Agricultural Economics*. (2022). [Link](#)

"The Short-Run Impacts of Immigration on Native Workers: A Sectoral Approach," with Pierre Mérel. Chapter 6 in R. Sauer (Ed.), *World Scientific Handbook of Global Migration*. (forthcoming). [Link](#)

Technical Reports

"The 2022 Greenhouse and Nursery Labor Employment Survey Summary of Preliminary Findings," with J. Edward Taylor, Edward Whitney, Dahye Kim, and AmericanHort. (2022). [Link](#)

"The H-2A Foreign Worker Program in 2020," with Philip Martin and Marcelo Castillo. USDA-ERS, Economic Information Bulletin. (2022). [Link](#)

"Federal Labor Standards Enforcement in Agriculture: Data Reveal the Biggest Violators and Raise New Questions About How to Improve and Target Efforts to Protect Farmworkers," with Daniel Costa and Philip Martin. *Economic Policy Institute Report*. (2020). [Link](#)

Outreach Articles

- "Farm Employee Heat-Related Illness Prevention and Regulatory Compliance," *Michigan Farm News*. (2023). [Link](#)
- "Understanding and Preventing Farm Employee Heat-Related Illness," Michigan State University Extension Farm Management Article. (2023). [Link](#)
- "A Declining Farm Labor Supply Could Cost California Farmers Billions," with Pierre Mérel. *ARE Update*, 26(2): 1-4. (2022). [Link](#)
- "2022 Michigan State University Custom Work Rates," with Jonathan LaPorte, Matthew Gammans, Melissa McKendree, Florencia Colella, and Corey Clark. *Michigan State University Extension, Farm Management Report*. (2022). [Link](#)
- "Labor Standards Enforcement in California Agriculture," with Philip Martin, Daniel Costa, and Forest Peterson. *Rural Migration News Blog* No. 208. (2021). [Link](#)
- "What Is the Future of Work in Agri-Food?" with Luc Christiaensen and J. Edward Taylor. *Brookings Institution*. (2020). [Link](#)
- "Revisiting Economic Assimilation of Mexican and Central American Immigrants in the United States," with Giovanni Peri. *Cato Institute Research Briefs in Economic Policy*, No. 220. (2020). [Link](#)
- "COVID-19 and Farm Workers: "Challenges Facing California Agriculture," with Timothy Beatty, Alexandra Hill, and Philip Martin. *ARE Update*, 23(5). (2020). [Link](#)
- "Recent Mexican and Central American Immigrants Have Performed Well in the Labor Market, but There Is Room for Improvement." *U.C. Davis Global Migration Center Immigration Facts Series*. (2020). [Link](#)
- "California Farmers Change Production Practices as the Farm Labor Supply Declines," with J. Edward Taylor. *ARE Update*, 22(6). (2019). [Link](#)
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Research Experience **Assistant Professor**

Department of Agricultural, Food, and Resource Economics, Michigan State University, Current

Postdoctoral Research Scholar

Under the Supervision of Timothy Richards, Arizona State University, January 2021 - August 2022

Graduate Student Researcher

For Professor Pierre Mérel, Intermittently Between July 2016 - December 2020

For Professor J. Edward Taylor, Intermittently Between July 2018 - September 2020

For Professor Giovanni Peri, September 2019 - December 2019

Consulting

National Council of Agricultural Employers, March 2021 - Current

Migration Dialogue, March 2020 - December 2020

World Bank Group, November 2018 - June 2019

Hoover Institution, June 2017 - August 2017

Expert Witness Experience

Columbia Legal Services, May 2023 - Current

National Council of Agricultural Employers, March 2023 - Current

California Agricultural Labor Relations Board, March 2021 - August 2022

Teaching Experience **Assistant Professor, Michigan State University**

Undergraduate: Labor and Personnel Management in the Agri-Food System, (AFRE 315), Spring 2023

Lecturer, University of California, Davis

Undergraduate: Agricultural Labor Economics, (ARE 150), Spring 2022

Guest Lecturer, Arizona State University

Undergraduate: Food and Agribusiness Policy Issues, Fall 2022

Guest Lecturer, University of California, Merced

Master's: Labor, Automation, and Sustainability in Agriculture: A Convergent Study, Winter 2022

Guest Lecturer, University of California, Davis

Undergraduate: Continuing and Professional Education: Japanese Agriculture Trainee Program, Fall 2019

Teaching Assistant, University of California, Davis

Master's: Applied Econometrics 1 (ARE 256A), Fall 2016

Undergraduate: Agricultural Labor Economics (ARE 150), Spring 2016, Spring 2018, Spring 2019

Econometrics (ARE 106), Winter 2018

Operations Research and Management Science (ARE 155), Winter 2017

Investment (ARE 143), Winter 2016

Selected Presentations

- "Health Coverage and Farmworker Productivity," Poster Session, Agricultural and Applied Economics Association Annual Meeting, Washington, DC, July 24, 2023.
- "Farm Labor," Prepared for and Delivered by Florencia Colella, Midwest Chestnut Producers Council Annual Meeting, Clarksville, MI, March 25, 2023.
- "Workers and the Workforce: Essential Contributors to American Agriculture," United States Department of Agriculture's Agricultural Outlook Forum, Plenary Speaker Session Moderated by the United States Secretary of Agriculture, Tom Vilsack, Washington, DC, February 23, 2023.
- "Farm Labor in the United States and Michigan," International Fruit Tree Association Annual Conference, Grand Rapids, MI, February 13, 2023.
- "Agricultural Labor Trends," Michigan Agri-Business Association Conference, Lansing, MI, January 11, 2023.
- "Survey Evidence About Farm Labor Scarcity and Adaptation Strategies," Great Lakes Expo, Grand Rapids, MI, December 7, 2022.
- "NCAE's Labor Availability Survey," National Council of Agricultural Employers Annual Agricultural Labor Forum, Las Vegas, NV, November 30, 2022.
- "Agricultural Labor Outlook." Michigan Agricultural Credit Conference, East Lansing, MI, October 25, 2022.
- "Chinese Trade Competition and Rural Mexican Migration." Agricultural and Applied Economics Association Annual Meeting, Anaheim, CA, August 2, 2022.
- "Dollar Store Entry and Rural Welfare." Agricultural and Applied Economics Association Annual Meeting, Anaheim, CA, August 2, 2022.
- "Agricultural Labor and Bargaining Power." Agricultural and Applied Economics Association Annual Meeting, Anaheim, CA, August 1, 2022.
- "The Impact of Minimum Wage Shocks on Low-Skilled Workers in the United States: Evidence from the H-2A Visa Agricultural Guestworker Program." Agricultural and Applied Economics Association Annual Meeting. Austin, TX, August 2, 2021.
- "Actions the Biden Administration and Congress Can Take to Better Protect Farmworkers." Economic Policy Institute, Virtual Presentation, February 10, 2021.
- "No Farm Workers, No Food? Evidence From Specialty Crop Production." United States Department of Agriculture Economic Research Service Challenges in Specialty Crop Production Workshop. Virtual Presentation, July 29, 2020.
- "The Effects of a Declining Farm Labor Supply on California Agriculture." University of California, Davis Global Migration Center Affiliate Meeting. Davis, CA, February 5, 2020.
- "The Short-Run Impacts of Immigration on Native Workers: A Sectoral Approach." Agricultural and Applied Economics Association Annual Meeting, Atlanta, GA, July 23, 2019.
- "Adapting to Labor Scarcity." Infaco Live Webinar Series. July 18, 2019.
- "The Effects of a Declining Farm Labor Supply on California Agriculture." Poster Session, U.C. Davis Economics Department Alumni Conference. Davis, CA, May 10, 2019.
- "Farmworkers and Nonfarm Work: Evidence from the NAWS." Department of Labor's NAWS at 30 Conference. Davis, CA, April 4, 2019.
- "The Short-Run Impacts of Immigration on Native Workers: A Sectoral Approach." Gifford Center for Population Studies, Migration Research Cluster Workshop. Davis, CA, December 6, 2018.
- "Evidence of a Changing Farm Labor Supply." University of California Agriculture and Natural Resources Cooperative Extension Annual Vegetable Crops Meeting. Davis, CA, November 27, 2018.
- "Agricultural Labor in the United States." Peruvian Delegation from Universidad Nacional Agraria La Molina. Davis, CA. November 5, 2018.

Selected Grants

- USDA-NIFA-AFRI Conference Grant, 2023: \$25,000
- M-AAA Grant (with David Ortega, Melissa McKendree, Barry Bradford, and Phil Durst), 2023: \$148,000
- USDA-OCE Co-op Grant (with Philip Martin), 2023: \$265,000
- Michigan Department of Agriculture & Rural Development, 2023: \$17,000
- Western Michigan Greenhouse Association, 2023: \$5,000
- Metro Detroit Flower Growers Association, 2023: \$5,000
- USDA-ERS RRED Co-op Grant (with Timothy Richards), 2022: \$20,000
- USDA-ERS RRED Co-op Grant (with Timothy Richards and Lauren Chenarides), 2021: \$20,000
- Giannini Foundation of Agricultural Economics Minigrant (with Pierre Mérel), 2020: \$30,000
- Giannini Foundation of Agricultural Economics Minigrant (with J. Edward Taylor), 2020: \$30,000
- Giannini Foundation of Agricultural Economics Minigrant (with Pierre Mérel), 2019: \$30,000
- Giannini Foundation of Agricultural Economics Minigrant (with J. Edward Taylor), 2019: \$30,000
- Giannini Foundation of Agricultural Economics Minigrant (with J. Edward Taylor), 2018: \$27,000

Professional Service

Referee, American Journal of Agricultural Economics
Referee, Food Policy
Referee, Migration Studies
Referee, Applied Economic Perspectives and Policy
Referee, Agricultural and Resource Economics Review
Referee, Binational Agricultural Research and Development Fund
Discussant, Agricultural and Applied Economics Association Annual Meetings
Discussant, UC Davis Migration Research Cluster Workshop

References

Timothy Richards, Marvin and June Morrison Chair of Agribusiness, Morrison School of Agribusiness, W. P. Carey School of Business, Arizona State University
Email: trichards@asu.edu

J. Edward Taylor, Distinguished Professor, Agricultural and Resource Economics, University of California, Davis
Email: taylor@primal.ucdavis.edu

Pierre Mérel, Professor, Agricultural and Resource Economics, University of California, Davis
Email: merel@primal.ucdavis.edu

Philip Martin, Professor Emeritus, Agricultural and Resource Economics, University of California, Davis
Email: martin@primal.ucdavis.edu

Giovanni Peri, Professor, Economics, University of California, Davis
Email: gperi@ucdavis.edu