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School of Economics Room 501, Social Sciences Building A02 The University of Sydney NSW 2006 Australia

#### EMPLOYMENT

# University of Sydney

Lecturer (Assistant Professor), School of Economics (2020–)

### University of Wisconsin, Madison

Assistant Professor, Robert M. La Follette School of Public Affairs (2015–2020)

Assistant Professor, Agricultural and Applied Economics (2016–2020)

Center for Demography and Ecology: Faculty affiliate (2016–2020)

UW Center for Financial Security: Faculty affiliate (2017–2020)

African Studies Program: Faculty affiliate (2018–)

# **EDUCATION**

Ph.D. University of California, Davis, Agricultural & Resource Economics (2015)

Lund University, Graduate student, School of Economics and Management (2008-2009)

**B.A.** Colby College, Economics, (Mathematics minor), Summa Cum Laude (2006)

# JOURNAL PUBLICATIONS

MICHLER, J. D., E. TJERNSTRÖM, S. VERKAART, AND K. MAUSCH (2019): "Money Matters: The Role of Yields and Profits in Agricultural Technology Adoption," *American Journal of Agricultural Economics*, 101, 710–731.

Carter, M. R., E. Tjernström, and P. Toledo (2019): "Heterogeneous Impact Dynamics of a Rural Business Development Program in Nicaragua," *Journal of Development Economics*, 138, 77–98.

Brown, P., A. J. Daigneault, E. Tjernström, and W. Zou (2018): "Natural Disasters, Social Protection, and Risk Perceptions," *World Development*, 104, 310–325.

Barriga Cabanillas, O., J. D. Michler, A. Michuda, and E. Tjernström (2018): "Fitting and Interpreting Correlated Random Coefficient (CRC) Models Using Stata," *Stata Journal*, 18, 159–173.

TJERNSTRÖM, E., M. R. CARTER, AND P. TOLEDO (2013): "Identifying the Impact Dynamics of a Small Farmer Development Scheme in Nicaragua," *American Journal of Agricultural Economics*, Papers and Proceedings, 95, 1359–1365.

TJERNSTRÖM, S. AND E. TJERNSTRÖM (2008): "Rational Foolishness Would Destroy a Public Service Broadcasting System," *Journal of Media Economics*, 21, 258–263.

TJERNSTRÖM, E. AND T. H. TIETENBERG (2008): "Do Differences in Attitudes Explain Differences in National Climate Change Policies?" *Ecological Economics*, 65, 315–324.

## Working Papers

- Learning by (Virtually) Doing: Experimentation and Belief Updating in Smallholder Agriculture with Travis Lybbert, Rachel Hernández Frattarola, and Juan Sebastian Correa Revised and resubmitted
- Can Smallholder Extension Transform African Agriculture? with Joshua Deutschmann, Maya Duru and Kim Siegal NBER Working Paper No. 26054
- Learning from Others in Heterogeneous Environments (being revised)
- Media and Motivation: the Effect of Performance Pay on Writers and Content with Ivan Balbuzanov and Jared Gars
- Seeds of Uncertainty: Information, Subjective Expectations, and Technology Adoption with Jared Gars
- Filling a Niche: the Impacts of a Local Seed Company on Maize Productivity in Kenya with Samuel Bird, Michael Carter, Travis Lybbert

#### Work in progress

- A Group Random Coefficient Approach to Modeling Heterogeneity in Technology Adoption with Oscar Barriga Cabanillas, Dalia Ghanem, Travis Lybbert, Jeffrey D. Michler, and Aleksander Michaela
- When Intentions Matter–Identifying the Prevalence and Source of Poor-quality Inputs in Kenya with Jose Clavijo and Travis Lybbert
- Nonlinear Pricing Complexity and Consumer Behavior with Joshua Deutschmann and Jeff Michler
- Arrested Development: the Inefficiencies of Electoral Cycles in Infrastructure Projects with Evan Morier
- The Dirt on Dirt: Soil Characteristics and Variable Fertilizer Returns in Kenyan Maize Systems with Michael Carter and Travis Lybbert
- Income Volatility and Technology Choice with Rachel Hernández Frattarola
- Selection and Heterogeneity in the Returns to Migration with Eduardo Cenci and Marieke Kleemans

## Grants: Over USD 6 million raised

- 2020-2022: National Science Foundation Economics (\$480,000) with Maya Duru and Laura Schechter Market-Level Effects of Competition in Agricultural Input Markets: Prices, Quality, and Mechanisms
- 2020-2022: Private Enterprise Development in Low-Income Countries (PEDL) Major Grant (£440,000) with Maya Duru and Laura Schechter

  Market-Level Effects of Competition: Prices, Quality, and Mechanisms
- 2019-2020: Graduate School Fall Research Competition Grant, UW-Madison (\$63,519) Pilot: Air Pollution, Human Capital, and Cognition
- 2017-2018: IFREE Small Grants Program (\$9,800) with Ivan Balbuzanov & Jared Gars Media and Motivation: the Effect of Performance Pay on Writers and Content
- 2017-2018: University of Chicago (\$2,857) with Angelino Viceisza An Experiment on Framing and Referrals to Boost Impact Investing

- 2017-2018: Economic Development and Institutions (EDI) pilot grant (\$18,027) with Nicole Bonoff Constructing Compliance: Reducing Tax Evasion Among Market Traders in Ghana
- 2017-2018: PEDL Exploratory Research Grant (\$22,980) with Travis Lybbert Baseline for an Information Intervention in the Agro-inputs Market in Kenya;
- 2017-2018: Graduate School Fall Research Competition Grant, UW-Madison (\$46,536)

  Making sense of Mother Nature: Farmer Learning in the Lab
- 2016-2017: Kohl Competition Award (\$47,100) with Travis Lybbert

  Testing Supply Chains for Fraudulent Fertilizer to Improve Regulation, Policy and Market Performance for

  Agro-inputs in Sub-Saharan Africa
- 2016: 3ie & AGRA (\$20,000) with Karl Hughes, Sarah Janzen, Judith Oduoul, and Laura Schechter Impact Evaluation of AGRA's Financial Inclusion Programmes for Smallholder Farmers in Kenya
- 2016-2020: NSF CRISP Type 2: Collaborative Research Grant (\$1,686,426) with Xiaopeng Li, Xin Wang, Kaibo Liu, Feng Ju, Jianhui Wang
   Harnessing Interdependency for Resilience: Creating an "Energy Sponge" with Cloud Electric Vehicle Sharing
- 2016-2017: Daniel Louis and Genevieve Rustvold Goldy Fellowship (\$6,500)
- 2016-2017: Global Center for Food Systems (\$96,000) with Travis Lybbert

  Bringing FarmVille to the Tropics: App-based Simulations to Build Farmers' Understanding of Customized

  Fertilizer Recommendations
- 2015-2016: Development Impact Lab (DIL) Innovate Grant (\$25,000) with Travis Lybbert Counterfeit Seed: Using Genetic Markers to Quantify the Prevalence of Counterfeit Maize Seed in Western Kenya
- 2013-2016: USAID BASIS Assets and Market Access Innovation Lab (\$424,000) with Michael Carter, Travis Lybbert and Mary Mathenge
  Evaluating the Socio-economic Impacts of Western Seed's Hybrid Maize Program
- 2013-2016: Agricultural Technology Adoption Initiative (\$345,000) with Michael Carter, Travis Lybbert and Mary Mathenge Impact of Mid-altitude Hybrid Maize in Western Kenya
- 2013-2016: Bill and Melinda Gates Foundation (\$286,000) with Michael Carter, Travis Lybbert and Mary Mathenge
  - Impact Evaluation of Western Seed Company's Hybrid Maize Program
- 2006-2007: Watson Fellowship, Thomas J. Watson Foundation (\$25,000) Nomad's Land Development, Conservation and Nomads

# Awards & Honors

- AAEA's Outstanding AJAE Article for "Money Matters: The Role of Yields and Profits in Agricultural Technology Adoption"
- Association for Public Policy Analysis and Management, 40 for 40 Fellowship, 2018
- Taylor Hibbard award for Excellence in Graduate Teaching, 2018 (based on student vote)
- Gordon A. King Best Dissertation Award, UC Davis Agricultural & Resource Economics (2015)
- Henry A. Jastro Graduate Research Fellowship, UC Davis (2012-2013)
- Departmental Fellowship, Agricultural and Resource Economics, UC Davis (2009-2010)
- Phi Beta Kappa, Colby College (2016)

# TEACHING

- University of Wisconsin, Madison. La Follette School of Public Affairs International cost-benefit analysis. Masters level. 2015, 2016, 2017, 2018, 2019 International policy analysis. Masters level. 2016
- University of Wisconsin, Madison. Agricultural & Applied Economics Applied microeconometrics using replication. PhD field course. 2016, 2017
   Economic and Agricultural Development of Africa. Undergraduate. 2018, 2019

# SUPERVISION

Rachel Frattarola, PhD AAE (2018) Dissertation committee member

Justin Delorit, PhD Civil & Environmental Engineering (2018) Dissertation committee member

Norihiko Matsuda, PhD AAE (2018) Dissertation committee member

Jessica Zhu, PhD AAE (2019) Dissertation committee member

Jens Engelmann, PhD AAE (2019) Dissertation committee member

Naoki Nishimura, PhD AAE, Dissertation committee member

Evan Morier, PhD Political Science, Dissertation committee member

Joshua Deutschmann, PhD AAE Dissertation committee member

Eduardo Cenci, PhD AAE, Dissertation committee member

Masters level independent study supervision: 2019 (2 student), 2018 (2 students), 2017 (3 students)

Undergraduate level independent study supervision: 2019 (2 students), 2018 (1 students), 2017 (2 students)

# INVITED SEMINARS & PANELS

Economics department, unless otherwise noted. Planned indicated with \*

- \*Workshop on Air Quality Monitoring with Low-Cost Sensors in Africa, Kigali Collaborative Research Center, Rwanda; \*Australian National University; \*University of New South Wales; \*Melbourne University
- 2019 Northwestern University; University of Illinois Urbana-Champaign; University of Sydney; Lund University; Yale Research Initiative on Research and Scale (Y-RISE); International Food Policy Research Institute (IFPRI)
- 2018 University of California, Davis (Ag & Resource Economics); Michigan State University; University of Copenhagen (IFRO)
- 2017 BASIS / Feed the Future Evidence Dissemination Event Panelist ("Enhancing Smallholder Productivity in Kenya: Evidence from a Randomized Controlled Trial of New Seed Varieties"); Chicago Council on Global Affairs & MSU Alliance for African Partnership panel on the intersection of youth and agriculture in Africa; Feed the Future/USAID Agrilinks Webinar: "Soil variation and why it matters" (recording)
- 2016 Paris School of Economics; Foundation for studies and Research on International Development (FERDI): Learning for adopting; What Works Global Summit Panelist 2016; University of North Dakota; USAID Global Development Lab
- Oregon State University (Ag & Resource Economics); Université Laval (Economics); University of Wisconsin-Madison (Public Affairs); Georgetown (GHD); Ohio State University (Ag & Resource Economics); University of Copenhagen (Ag & Resource Economics); University of San Francisco; DIME Impact Evaluation Workshop; University of Minnesota (Ag & Resource Economics); University of Illinois Urbana-Champaign (Ag & Resource Economics)
- 2014 iHub Nairobi; Colby College; Bowdoin College; BASIS/I4 Meeting

# Invited / Accepted conferences & workshops

- 2019 MIT Conference on Online Experiments (MIT CODE); Northeast Universities Development Consortium (NEUDC); Midwest International Economic Development Conference (MIEDC); NBER Transforming Rural Africa Conference
- 2018 Midwest International Economic Development Conference (MIEDC); ICABR; Annual Bank Conference on Africa; Nordic Conference on Behavioral and Experimental Economics; Advances in Field Experiments; Agricultural & Applied Economics Association (AAEA) Annual Meeting; Northeast Universities Development Consortium; (Hawaii Applied Microeconomics One-Day Conference) HAMOC
- 2017 PacDev; Midwest International Economic Development Conference (MIEDC); The International Consortium on Applied Bioeconomy Research (ICABR); Working Group on African Political Economy (WGAPE) Annual Meeting, Agricultural & Applied Economics Association (AAEA) Annual Meeting, SIFE (University of Chicago Summer Institute on Field Experiments); MGAPE @ Northwestern (Midwest Group in African Political Economy); Economic Development and Institutions (EDI) Annual Conference
- 2016 Global Center for Food Systems Innovation Grantee Workshop; CSAE; Midwest International Economic Development Conference (MIEDC); Agricultural & Applied Economics Association (AAEA) Annual Meeting; Nordic Conference on Behavioral and Experimental Economics
- 2015 CSAE; UC Berkeley Development lunch; Midwest International Economic Development Conference (MIEDC); Agricultural & Applied Economics Association (AAEA) Annual Meeting; NEUDC
- 2013 Allied Social Science Association Annual Meetings (ASSA)
- 2012 UC Davis Development Workshop; MCC Impact Evaluation Learning Event; UC Berkeley Development Lunch; Nordic Conference in Development Economics; GARESC; NEUDC

#### Invited writing & book chapters

- Carter, Michael, Mary K. Mathenge, Sam Bird, Travis J. Lybbert, Timothy Njagi, and Tjernström, Emilia.
   2017. "Local Seed Company Fills a Niche to Increase Maize Productivity in Kenya".
   BASIS Brief No. 2017–01.
- Tjernström, Emilia, Michael Carter, and Travis J. Lybbert. 2017. "Diverse Soils and Inputs Challenge Recommendations to Maize Farmers in Kenya."

  BASIS Brief No. 2017-03
- Tjernström, Emilia. 2016. "Learning for Adopting: Signals, Similarity and Seeds: Social Learning in the Presence of Imperfect Information and Heterogeneity."
  - In Technology Adoption in Developing Country Agriculture.
  - Policy Briefs from the Workshop Organized by Ferdi and SPIA, Clermont-Ferrand.
- Tjernström, Emilia. 2015. "Learning-by-doing vs. Learning-from-others: Heterogeneity Matters". BASIS Brief No. 2015-01
- Carter, Michael R., Travis J. Lybbert, Mary K. Mathenge, and Emilia Tjernström. 2014. "Spurring Technological Innovation and Poverty Reduction? Evaluating the Impact of a New Seed Market Actor in Kenya".
  - BASIS Brief No. 2014-04
- Carter, Michael R., Emilia Tjernström, and Patricia Toledo. 2012. "Investing in Small-Farm Productivity: the Nicaragua MCC Compact".
  - BASIS Brief No. 2012-6

- Carroll, Christine, Diane Charlton, and Emilia Tjernström. 2012. "Price Premiums for Organic Strawberries"
  - Agricultural and Resource Economics Update, 15(6):12-14.
- Tjernström, Emilia. 2009. "Kunnigt och (o)kontroversiellt om Råvarumarknaden" (Book Review of 'Handbook of Primary Commodities in the Global Economy').

  Ekonomisk Debatt, 37(3):85–88.

#### SELECT MEDIA COVERAGE

- 2019 The Economist: "Better Seeds Could Help African Farmers Grow Far More. But Their Governments are Standing in the way"
- 2017 "GCFSI Innovators Develop Virtual Game to Benefit Maize Farmers"
- 2016 "Bringing Farmville to the Tropics: App-based Simulations to Guide Fertilizer Recommendations"
- 2016 Interview with Global Center for Food Systems Innovation (Video interview)
- 2016 Ignite Talk: Bringing Farmville to the tropics (Brief video presentation)
- 2016 "Communicating Scientific Research: Bringing Farmville to the Tropics"

### Institutional service

## University of Wisconsin - Madison

- 2019 PhD Job Candidate Placement director, Department of Agricultural & Applied Economics
- 2018 PhD Job Candidate Placement Director, Department of Agricultural & Applied Economics
- 2018 Masters-level Admissions Committee, La Follette School of Public Affairs
- 2018 Family Impact & Committee Connect, La Follette School of Public Affairs
- 2018 Curriculum & Student Services Committee, La Follette School of Public Affairs
- 2018 Development Workshop Coordinator, Department of Ag & Applied Economics
- 2017 Student Diversity & Inclusion Liaison, La Follette School of Public Affairs
- 2017 Bromley Prize Review Committee, Department of Ag & Applied Economics
- 2017 Masters-level Admissions Committee, La Follette School of Public Affairs
- 2017 Development Workshop Coordinator, Department of Ag & Applied Economics
- 2016 Student Diversity & Inclusion Liaison, La Follette School of Public Affairs
- 2016 Graduate Committee (PhD admissions), Department of Agricultural & Applied Economics
- 2016 Bromley Prize Review Committee, Department of Ag & Applied Economics
- 2015 Student diversity & inclusion liaison, La Follette School of Public Affairs

#### SERVICE TO THE PROFESSION

- 2020 Master's Thesis Award Committee, Agricultural & Applied Economics Association
- 2019 Master's Thesis Award Committee, Agricultural & Applied Economics Association
- 2018 Abstract Reviewer for International Development Section, Agricultural & Applied Economics Association Annual Meeting
- 2018 Abstract Reviewer for Behavioral Economics Section, Agricultural & Applied Economics Association Annual Meeting
- 2017 Abstract Reviewer for Behavioral Economics Section, Agricultural & Applied Economics Association Annual Meeting
- 2016 Abstract reviewer for Annual World Bank Conference on Land and Poverty

#### Conference organization

## Program Committee

2020	Topic Leader for Selected Papers in International Development, Agricultural & Applied Economics Association Annual Meeting
2019	Scientific Committee, Midwest International Economic Development Conference
2018	Scientific Committee, Midwest International Economic Development Conference
2017	Scientific Committee, Midwest International Economic Development Conference

2016 Scientific Committee, Midwest International Economic Development Conference

# Refereeing

#### Journals:

Agricultural Economics, American Journal of Agricultural Economics, China Economic Review, Ecological Economics, the Economic Journal, European Journal of Political Economy, Food Policy, Journal of Agricultural Economics, Journal of Consumer Affairs, Journal of Development Economics, Journal of Development Studies, Journal of Economic Behavior and Organization, PNAS

#### Grants:

3ie, Agricultural Insurance Thematic Window (2016 & 2017); 3ie, Agricultural Innovation Thematic Window; CGIAR Standing Panel on Impact Assessment (SPIA)

#### OTHER PROFESSIONAL EXPERIENCE

Monitoring & evaluation consultant, Millennium Challenge Corporation (2012) Teaching assistant, Environmental and Resource Economics, Lund University (2008) Economics teacher, United World College Costa Rica (2007-2008)

### OTHER INFORMATION

Languages: Swedish (Native), English, French, Spanish (Fluent)

**Associations:** American Economic Association, Agricultural and Applied Economics Association, Economic Science Association, Australasian Agricultural and Natural Resource Association