

Xuan Chen

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Rollins School of Public Health, Emory University
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RESEARCH INTERESTS My current research focuses on agricultural and resource economics, in particular on production, risks, labor supply, environmental impact and health outcome.

EDUCATION **Ph.D., Economics**, July 2013
North Carolina State University, Raleigh, NC

M.S., Economics, December 2009
North Carolina State University, Raleigh, NC

B.S., Statistics, July 2005
Peking University, Beijing, China

B.S., Economics (double major), July 2005
Peking University, Beijing, China

CURRENT EMPLOYMENT **Research Assistant Professor** (primary appointment), August 2017 – present
(Research-track, 15% teaching & 85% research)
Department of Environmental Health, School of Public Health, Emory University, Atlanta, GA

Instructor (secondary appointment), August 2017 – present
Institute for Quantitative Theory and Methods, Emory University, Atlanta, GA

PAST EXPERIENCE **Farm Credit Assistant Professor of Agricultural Economics**, August 2013 – August 2017
(Tenure-track, Farm Credit East endowed position, 50% teaching & 50% research)
School of Economics, University of Maine, Orono, Maine

Director of Farm Credit Fellowship Program, January 2014 – August 2017
(Collaborative training program between University of Maine and Farm Credit East)
School of Economics, University of Maine, Orono, Maine

Faculty Fellow, January 2014 – August 2017
Maine Agricultural Center, University of Maine, Orono, Maine

Instructor / Teaching Assistant / Research Assistant, August 2007 – June 2013
Department of Economics and Department of Agricultural and Resource Economics,
North Carolina State University, Raleigh, NC

SAS Graduate Student Econometrician, May 2011 – August 2011
SAS Inc., Econometrics and Time Series Group, Cary, NC

Offshore Banking Manager and International Trade Specialist, July 2005 – July 2007
China Merchants Bank, Headquarters, Shenzhen, China

PUBLICATIONS

Chen, X., & Vuong, N.* (2018) “Climate and Off-farm Labor Supply of Agricultural Households: Evidence from Rural Vietnam”, revised and resubmitted to *Agricultural Economics*

Chen, X., Chen, J.*, & Hu, Y. (2018) “Too Risky to Focus on Agriculture? A Study of Chinese Agricultural Households’ Off-Farm Employment Decisions”, *Sustainability*, accepted

Chen, X., Goodwin, B., & Prestemon, J. (2018) “How to Fight Against Southern Pine Beetle Epidemics: An Insurance Approach”, *Canadian Journal of Agricultural Economics*, DOI: 10.1111/cjag.12186

Chen, X., Bouchard, D.*, & Anderson, G. (2018), “How Effective Is A Dairy Relief Program? Evaluating Maine’s Tier Payment Program Using A Simulation Approach”, *Sustainability*, 10(3514)

Scuderi, B.*, & **Chen, X.** (2018) “Production Efficiency in New England’s Oyster Aquaculture Industry”, *Aquaculture Economics and Management*, DOI: 10.1080/13657305.2018.1449272

Scuderi, B.*, & **Chen, X.** (2018) “Assessing Price Integration and Trade Policy in the U.S. Catfish Market”, *Aquaculture Economics and Management*, 22(1): 112-130.

Evans, K., **Chen, X.** & Robichaud, C. (2017) “A Hedonic Analysis of the Impact of Marine Aquaculture on Coastal Housing Prices in Maine”, *Agricultural and Resource Economics Review*, 46(2), 242-267

Chen, X., Yarborough, D., & Cote, J. (2017) “Wild Blueberry Systems Approach: Economic and Risk Analysis”, *Acta Horticulturae*, 1180:143-150

Asarea, E., Drummond, F., Hoshide, A., Criner, G., & **Chen, X.** (2017) “Economic Risk of Bee Pollination in Maine Wild Blueberry, *Vaccinium angustifolium* Aiton”, *Journal of Economic Entomology*, Volume 110, Issue 5: 1980-1992

Evans, K., Athearn, K., **Chen, X.** & Bell, K. (2016) “Measuring the Impact of Pollution Closures on Commercial Shellfish Harvest: the Case of Soft-shell Clams in Machias Bay, Maine”, *Ocean and Coastal Management* 130: 196-204.

Chen, X., Anderson, G., Bouchard, D.*, McGuire, J.*, Criner, G., & Marcinkowski, D. (2016) “Costs of Producing Milk in Maine: Results from the 2013 Cost-of-Production Survey”, *Maine Agricultural and Forest Experiment Station Technical Bulletin*: 854.

Chen, X., Goodwin, B., & Prestemon, J. (2014) “Is Timber Insurable? A Study of Wildfire Risks in the U.S. Forest Sector Using Spatio-Temporal Models”, *American Journal of Agricultural Economics*, 96(1), 213–231.

(* graduate advisees)

HONORS & AWARDS

- The 2018 Vietnam Economist Annual Meeting Best Researcher Paper Award (with advisee Vuong Dinh Tuan Nguyen)
- Northeastern Agricultural and Resource Economists Association, Master’s Thesis of Merit Award for Year 2018 (as advisor, advisee: Ben Scuderi)
- Early Career Travel Grant, Agricultural & Applied Economics Association, 2014
- Bangor Savings Bank Faculty Development Award, University of Maine, 2014
- Graduate Student Travel Grant, Agricultural & Applied Economics Association, 2012

- Graduate Student Association Travel Award, North Carolina State University, 2011
- Graduate School Scholarship, North Carolina State University, 2007 – 2012
- NC State Alumni Association Fellowship, North Carolina State University, 2007 – 2008
- Certified Documentary Credit Specialist, International Chamber of Commerce, 2006
- First Prize of Eastern China Essay Contest, 2001
- Outstanding High School Graduate of Jiangsu Province, China, 2001

WORKING PAPERS Cole, A.*, and **Chen, X.**, “Off-farm Employment in Aquaculture: A Case Study of New England’s Oyster Growers”, *under review*

McGuire, J.*, Leahy, J., **Chen, X.**, Noblet, C., Hanes, S., and Lindenfeld, L., “Beyond conventional vs. organic: The importance of social capital in sustainable agriculture research”, *under review*

Chen, X., Liu, G., Qu, H., Goodwin, B., & Prestemon, J., “Spatio–Temporal Modeling of Lightning Fires on Forestland: A Machine Learning Approach”, *in preparation for submission*.

Chen, X., & Vuong, N.*, “Effect of Pesticide Use on Farmers’ Healthcare Expenditure in Vietnam”, *in preparation for submission*

Chen, X., Liu, Y., & Chen, Z. “Estimating Colorado Residents’ Willingness to Pay for Wildfire-related Air Pollution with Hedonic Models”, *in progress*

Chen, X., Liu, Y., & He, T., “Is Stroke Associated with PM 2.5 Exposure? A Two-Year Study of a Mega City in China”, *in progress*

Chen, X., & Liu, Y., “Tap for Free? Measure Defensive Behavior Against Air Pollution Using Mobile App Data”, *in progress*

Chen, X., & Liu, Y., “The Economic Benefit of A High Resolution Air Pollution Map Product: Study Colorado Wildfires using Cost-Benefit Analysis”, *in progress*

Chen, X., Qu, H., & Liu, G., “To Continue or Shut Down? Using Machine Learning Methods to Analyze Dairy Farmer’s Decisions”, *in progress*

Chen, X., & Cole, A., “Estimating New England Oyster Growers’ Demand of Insurance Using A Survey Approach”, *in progress*.

Chen, X., & Alyokhin, A., “Effectively Control the Risks of Colorado Potato Beetle in the Potato Industry: A Spatial Approach”, *in progress*.

(* graduate advisees)

CONFERENCE PROCEEDINGS **Chen, X.** & Chen, J.*, “Assessing Off-farm Employment Decisions: A Theoretical Model and An Empirical Study of China’s Agricultural Households”, *Proceeding of China Agricultural Economic Review 10th Annual Meeting with IFPRI*

Chen, X. & Vuong, N.*, “Climate and Off-farm Labor Supply of Agricultural Households: Evidence from Rural Vietnam ”, *Collection of Agricultural and Applied Economics Association 2018 Annual Meeting*, <https://ageconsearch.umn.edu/record/236262>

Chen, X., Chen, J.*, & Huang, C., “Assessing Off-farm Employment Decisions of Rural Households in China”, *Collection of Agricultural and Applied Economics Association 2016 Annual Meeting*, <https://ageconsearch.umn.edu/record/236262>

Chen, X. & Scuderi, B.*, “Evaluating the Substitutability and Market Integration between Domestic and Imported Catfish”, *Collection of Agricultural and Applied Economics Association 2016 Annual Meeting*, <https://ageconsearch.umn.edu/record/235550>

Chen, X. & Goodwin, B. K., “Spatio-Temporal Modeling of Lightning Fires on Forestland: A Compensation Scheme”, *Collection of Agricultural and Applied Economics Association 2013 Annual Meeting*, <https://ageconsearch.umn.edu/record/151285>

Chen, X. & Goodwin, B. K., “Spatio-Temporal Modeling of Wildfire Risks in the U.S. Forest Sector”, *Collection of Agricultural and Applied Economics Association 2011 Annual Meeting*, <https://ageconsearch.umn.edu/record/103628>

GRANTS

“Wildfires in the Rocky Mountains Region: Current and Future Impacts on PM2.5, Health, and Policy”, Environmental Protection Agency, \$787,298, 2015 – 2018.

Role: Co-Investigator

“Determining the Current Cost of Producing Milk in Maine 2013”, State of Maine, Department of Agriculture, Conservation & Forestry, Maine Milk Commission, \$28,390, 2014 – 2016.

Role: Principal Investigator

“Evaluating risk profile and financial performance of various types of agricultural and natural resource operations in Maine”, Maine Agriculture and Forestry Research Station, National Institute of Food and Agriculture – USDA, ME021603, 2015 – 2020.

Role: Principal Investigator

“Understanding Spatio-Temporally Correlated Risks of Contagious Hazards in Maine Crop Production and Designing Associated Financial Instruments for Farmers”, Maine Agriculture and Forestry Research Station, National Institute of Food and Agriculture – USDA, ME021419, 2013 – 2015.

Role: Principal Investigator

“Maine EPSCoR: The Nexus of Coastal Social-Environmental Systems and Sustainable Ecological Aquaculture”, Experimental Program to Stimulate Competitive Research (EPSCoR), National Science Foundation, #IIA-1355457, \$20,000,000, 2014 – 2019.

Role: Co-Investigator

“Specialty Crops and Food Systems: Exploring Markets, Supply Chains and Policy”, Multi-State Program, National Institute of Food and Agriculture – USDA, ME031619, 2015 – 2020.

Role: Co-Investigator

“Modeling the Risk of Forest Stock Damages and Private Property Losses from Fires and Natural Disasters”, USDA Forest Service, \$35,000, 2008 – 2009.

Role: Research Assistant

INVITED SEMINARS AND CONFERENCE PRESENTATIONS

“Assessing Off-farm Employment Decisions: A Theoretical Model and An Empirical Study of China’s Agricultural Households”, Selected Presentation, China Agricultural Economic Review (CAER) 10th annual conference, November 2018, Guangzhou, China

“Off-farm Employment Decisions of China’s Agricultural Households when Facing Uncertainty”, Selected Presentation, Chinese Economists Society Annual Meeting, June 2018, Hefei, China

“A Hedonic Analysis of the Impact of Marine Aquaculture on Coastal Housing Prices in Maine”, Invited Seminar, Department of Environmental Health, Rollins School of Public Health, Emory University, June 2017, Atlanta, GA

“A Hedonic Analysis of the Impact of Marine Aquaculture on Coastal Housing Prices in Maine”, Invited Seminar, Nicholas School of the Environment, Duke University, May 2017, Durham, NC

“Assessing Off-farm Employment Decisions of Rural Households in China”, Track Session Presentation, *Agricultural and Applied Economics Association, China Section*, July 2016, Boston, MA

“Assessing Off-farm Employment Decisions of Rural Households in China”, Invited Seminar, *School of Economics and Management, Zhejiang Sci-tech University*, November 2015, Hangzhou, China

“Wild Blueberry Enterprise Budget”, Invited Seminar, *Maine Wild Blueberry Advisory Committee*, November 2015, Orono, ME

“Evaluating Cost of Production of Maine Dairy Farms Using an On-Site Interview Approach”, *Agricultural and Applied Economics Association Annual Meeting*, July 2015, San Francisco, CA

“An Empirical Study of Off-farm Employment Choices by Rural Households in China”, *3rd Maine Economics Conference*, May 2015, Colby, ME

“Facing Disaster Risks? An Insurance Proposal”, Invited Seminar, *Spruce Budworm Conference, University of Maine’s Cooperative Forestry Research Unit*, October 2014, Orono, ME

“Are Dairy Farmers Going to Accept the Dairy Producer Margin Protection Program? A Survey Study in Maine”, Selected Presentation, *Agricultural and Applied Economics Association 2014 Crop Insurance Symposium*, October 2014, Louisville, KY

“Social Ecological Food Systems: Lessons from Maine Organic Dairy’s Economic Networks”, Selected Presentation, *Agricultural and Applied Economics Association Annual Meeting*, July 2014, Minneapolis, MN

“Effectively Control the Risks of Colorado Potato Beetle in the Potato Industry: A Spatial Approach”, Selected Presentation, *Agricultural and Applied Economics Association Annual Meeting*, July 2014, Minneapolis, MN

“Evaluate and Hedge the Broad-scale Risks of Contagious Hazards in the Forest Sector”, Invited Seminar, *School of Forest Resources, University of Maine*, January 2014, Orono, ME

“Spatio-Temporal Modeling of Lightning Fires on Forestland: A Compensation Scheme”, Selected Presentation (selected paper), *Agricultural and Applied Economics Association Annual Meeting*, August 2013, Washington, D.C.

“Is Timber Insurable? A Study of Wildfire Risks in the U.S. Forest Sector Using Spatio-Temporal Models”, Invited Seminar, *School of Economics, University of Maine*, May 2013, Orono, ME

“Is Timber Insurable? A Study of Wildfire Risks in the U.S. Forest Sector Using Spatio-Temporal Models”, Invited Seminar, *Department of Agricultural Economics and Economics, Montana State University*, November 2012, Bozeman, MT

“Modeling Forest Wildfire Risks with Non-structural Correction for Spatio-temporal Autocorrelation: A Block Bootstrapping Approach”, Selected Presentation (poster), *Agricultural and Applied Economics Association Annual Meeting*, August 2012, Seattle, WA

“Is Timber Insurable? A Study of Wildfire Risks in the U.S. Forest Sector Using Spatio–Temporal Models”, Summer Seminar Series, *Department of Economics, North Carolina State University*, July 2012, Raleigh, NC

“Spatio–Temporal Modeling of Wildfire Risks In the U.S. Forest Sector”, Selected Presentation (selected paper), *Agricultural and Applied Economics Association Annual Meeting*, July 2011, Pittsburgh, PA

“Spatio–Temporal Modeling of Southern Pine Beetle Outbreaks with a Block Bootstrapping Approach”, Selected Presentation (poster), *Agricultural and Applied Economics Association Annual Meeting*, July 2011, Pittsburgh, PA

TEACHING
ACTIVITIES

Introduction to Statistical Inference (Emory University, QTM 100)

- Fall 2018, Spring 2018

Advanced Microeconomics (University of Maine, ECO 515)

- Spring 2017, Spring 2015, Spring 2014

Agricultural Economics and Agribusiness (University of Maine, ECO 497)

- Fall 2016, Fall 2015, Fall 2014

Intermediate Microeconomics w/ Calculus (University of Maine, ECO 420)

- Spring 2017, Fall 2015

Intermediate Microeconomics w/o Calculus (University of Maine, ECO 350)

- Fall 2014, Fall 2013

Fundamental Economics (North Carolina State University, EC 201)

- Spring 2012 (2 sections); Fall 2011 (2 sections); Spring 2011 (3 lab sections); Fall 2010 (3 lab sections); Spring 2010 (3 lab sections); Fall 2009 (3 lab sections)

GRADUATE
ADVISING

Chair of Doctoral Dissertation Committee

- Julia McGuire (Ph.D. in Environmental and Ecological Science, UMaine, May 2016)
Placement: Lecturer, University of Maine

Chair of Master Thesis Committee

- Dylan Bouchard (M.S. in Economics, UMaine, August 2016)
Placement: Ph.D. student in Agricultural Economics, NC State University
- Jing Chen (M.S. in Economics, UMaine, August 2016)
- Ben Scuderi (M.S. in Resource Economics and Policy, UMaine, May 2017)
Placement: Research Analyst, Southwick Associates
- Nguyen Tuan (M.S. in Economics, UMaine, July 2018)
Placement: Ph.D. student in Agricultural Economics, University of Wisconsin, Madison
- Avery Cole (M.S. in Economics, UMaine, expected in July 2019)

Member of Doctoral Dissertation Committee

- Jingjing Wu (Ph.D. in Marine Sciences, Clarkson University, in progress)

SERVICES

Reports on Global Health Research, Editor, August 2018 – present

The 4th International Conference on Public Health (ICOPH 2018), Review Committee, 2018

Graduate Committee, School of Economics, University of Maine, January 2014 – August 2017

Graduate School Curriculum Committee, University of Maine, August 2015 – August 2017

SEANET Reporting Subcommittee, University of Maine, August 2015 – August 2017

Maine's Spruce Bud Worm Task Team for Research and Technology, March 2014 – August 2017

Paper Reviewer

- American Journal of Agricultural Economics
- Agricultural Economics
- Aquaculture Economics and Management
- China Agricultural Economic Review
- Journal of Agricultural and Applied Economics
- Forest Policy and Economics
- International Journal of Financial Studies
- Aquaculture and Fisheries
- Agricultural and Applied Economics Association Annual Meeting

**PROFESSIONAL
MEMBERSHIPS**

The Chinese Economists Society (2018 – Present)

Agricultural and Applied Economics Association (2011 – Present)

Northeastern Agricultural and Resource Economics Association (2014 – 2017)