Cindy L. Yu
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Department of Statistics
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Iowa State University

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(I) EDUCATION

Ph.D., Statistics	Cornell University, Ithaca, NY	May 2005
M.S., Statistics	Cornell University, Ithaca, NY	May 2002
M.S., Statistics	University of Minnesota, Twin Cities, MN	May 2000
B.S., Mathematics	Sichuan University, China	July 1995

(II) EMPLOYMENT

Iowa State University appointment

Full Professor	Department of Statistics	2020-present
Associate Professor	Department of Statistics	2012-2020
Assistant Professor	Department of Statistics	2005-2012

Center for Survey Statistics and Methodology, Iowa State University

Affiliated Faculty		2005-present

Other appointment

Quant Analyst	Merrill Lynch, NY	Summer 2001
Teaching Assistant	Cornell University, NY	2000-2005
Teaching Assistant	University of Minnesota, MN	1998-2000

(III) RESEARCH AREAS

Mathematical Finance: modelling jump processes in continuous-time asset pricing models; modelling dynamic stochastic general equilibrium
Survey Statistics: semiparametric quantile regression imputation method under ignorable and non-ignorable missing
Time Series Analyses: Bayesian shrinkage priors used in vector autoregressive models; Bayesian analyses of dynamic factor models in nowcasting
Causal Inference: analyses of multiple treatment effects using observational data from complex survey

(IV) PUBLICATIONS

[alph.] --- alphabetical order following the convention in finance journals

* --- graduate students whom I advised

(a) Referred Journal Publications:

- Li, H., Wells, M. and **Yu, C.** (2008) [***alph.***], A Bayesian Analysis of Time-Changed Levy Processes of Return Dynamics, *Review of Financial Studies*, 21: 2345-2378.

- Chan, N. H., Chen, S., Peng, L. and **Yu, C.** (2009) [***alph.***], Empirical Likelihood Methods Based on Characteristic Functions with Applications to Levy Processes, *Journal of American Statistical Association, Theory and Methods Section,* 104: 1621–1630.

- **Yu, C.** and Legg, J. (2010), A Calibration Experiment in a Longitudinal Survey with Errors-in-Variables, *Journal of Agricultural, Biological and Environmental Statistics,* 15: 139-157.

- Legg, J. and **Yu, C.** (2010), A Comparison of Sample Set Restriction Procedures, *Survey Methodology*, 36: 69-79.

- Du, X., Hayes, D. and **Yu, C.** (2010), Dynamics of Biofuel Stock Prices: A Bayesian Approach, *American Journal of Agricultural Economic,* 93 (2): 418–425.

- **Yu, C**., Li, H. and Wells, M. (2011), Estimation of Levy Jump Models Under the Risk Neutral and Physical Measure Using Stock and Option Prices, *Mathematical Finance*, 21, No. 3: 383–422.

- Kim, J. and **Yu, C.** (2011), A semi-parametric estimation of mean functionals with non-ignorable missing data, *Journal of American Statistical Association, Theory and Methods Section*, 106: 157-165.

- Li, W.*****, **Yu, C.**, Carriquiry, A. and Kliemann, W. (2011), The Asymptotic Behavior of the R/S Statistic for Fractional Brownian Motion, *Statistics and Probability Letters*, 81: 83-91.

- Kim, J. and **Yu, C.** (2011), A New Replication Method for Two-phase Stratified Sampling, *Survey Methodology,* 37 (1): 67-74.

- Du, X., **Yu, C.** and Hayes, D. (2011), Speculation and Volatility Spillover in the Crude Oil and Agricultural Commodity Markets: A Bayesian Analysis, *Energy Economics*, 33: 497–503.

- Du, X., Hennessy, D. and **Yu, C.** (2012), Testing Day's Conjecture that More Nitrogen Decreases Crop Yield Skewness, *American Journal of Agricultural Economic,* 94: 225-237.

- Chen, S., Peng, L. and **Yu, C.** (2013), Empirical Likelihood Estimation and Test Based on Conditional Characteristic Function, *Bernoulli*, 19 (1): 228-251.

- Li, H., Li, T. and **Yu, C.** (2013) [***alph.***], No-Arbitrage Taylor Rules with Switching Regimes, *Management Science*, 59 (10): 2278-2294.

- **Yu, C.**, Legg, J. and Liu, B.* (2013), Estimating Multiple Treatment Effects Using Two-phase Regression Estimators, *Electronic Journal of Statistics,* 7 (0): 2737-2761.

- Du, X., **Yu, C.,** Hennessy, D. and Miao R. (2015), Geography of Crop Yield Skewness, *Agricultural Economics,* 46: 1-11.

- Potoski, M., Urbatsch, R., and **Yu, C.** (2015), Temperature Biases in Public Opinion Surveys, *Weather, Climate and Society,* 7:2: 192-196.

- Chen, S.***** and **Yu, C.** (2016), Parameter Estimation Through Semiparametric Quantile Regression Imputation, *Electronic Journal of Statistics*, Vol. 10, No. 2: 3621-3647.

- Kou, S., **Yu, C.,** and Zhong, H.* (2017) [***alph.***], Jumps in Equity Returns Before and During the Financial Crisis, *Management Science,* Vol. 63, No. 4: 988-1010.

- Liu, B.*****, **Yu, C.**, Price, M.* and Jiang, Y. (2018), Generalized Method of Moments Estimators for Multiple Treatment Effects Using Observational Data from Complex Survey, *Journal of Official Statistics,* Vol. 34, No. 3: 753-784.

- Zhang, Y.*****, **Yu, C.,** Li, H. and Hong, Y. (2018), Nowcasting China's Gross Domestic Product Using a Bayesian Approach, *Journal of Management Science and Engineering*, 3(4): 232-258.

- Follett, L.***** and **Yu, C.** (2019), Achieving Parsimony in Bayesian VARs with the Horseshoe Prior, *Econometrics and Statistics,* 11: 130-144.

- Berg. E. and **Yu, C.** (2019), Semi-parametric Quantile Regression Imputation for a Complex Survey with Application to the Conservation Effects Assessment Project, *Survey Methodology*, Vol. 45, No. 2: 249-270.

- Li, E., Li, H., Wang, S. and **Yu, C.** (2019) [***alph.***], Macroeconomic Risks and Asset Pricing: Evidence from a Dynamic Stochastic General Equilibrium Model, *Management Science,* Vol. 65, No. 8, 3585–3604.

- Price, M.*****, **Yu, C.,** Hennessy, D. and Du, X. (2019), Are Actuarial Crop Insurance Rates Fair? An Analysis Using a Penalized Bivariate B-spline Method, *Journal of the Royal Statistical Society, Series C (Applied Statistics),* Vol. 68, Part 5, pp. 1207-1232.

- **Yu, C.**, Li, J., Karl, M. and Krueger, T. (2020), Obtaining a Balanced Area Sample for the Bureau of Land Management Rangeland Survey, *Journal of Agricultural, Biological and Environmental Statistics*, Vol. 25, No. 2, 250-275.

- Luo, J.* and **Yu, C.** (2021), Determining Number of Factors in Dynamic Factor Models Contributing to GDP Nowcasting, *Mathematics*, Vol. 9, No. 22, 2865, https://doi.org/10.3390/math9222865

- Zhang, Y.*, **Yu, C.** and Li, H. (2022), Nowcasting GDP Using Dynamic Factor Model with Unknown Number of Factors and Stochastic Volatility: A Bayesian Approach, *Econometrics and Statistics*, Vol. 24, 75-93. https://doi.org/10.1016/j.ecosta.2021.08.009

- Stuart, M.* and **Yu, C.** (2022), A Computationally Efficient Method for Selecting a Split Questionnaire Design, *Communications in Statistics - Simulation and Computation*, Vol. 51, No. 5, 2464-2486. https://doi.org/10.1080/03610918.2019.1697819

- Berg, E. and **Yu, C.** (2022), Estimation for Nonignorable Missing Response or Covariate Using Semi-Parametric Quantile Regression Imputation and a Parametric Response Probability Model, *Statistica Sinica* (32), 1611-1631. https://doi.org/10.5705/ss.202020.0053

- Luo, J.* and **Yu, C.** (2023), The Application of Symbolic Regression on Identifying Implied Volatility Surface, *Mathematics*, Vol. 11, No. 9, 2108. https://doi.org/10.3390/math11092108

- Garman, S., **Yu, C.**, Li, Y.* (2024), Composite Estimation to Combine Spatially Overlapping Environmental Monitoring Surveys, *PLOS ONE* 19(3): e0299306. https://doi.org/10.1371/journal.pone.0299306

- Chen, Z.*, Li, Y.* and **Yu, C**. (2024) [***alph.***], Modelling Implied Volatility Surface Using B-splines with Time-dependent Coefficients Predicted by Tree-based Machine Learning Methods, *Mathematics*, 2024, 12, 1100. https://doi.org/10.3390/math12071100

- Wang, Z*, Zhu, Z and **Yu, C.** (2025), Variable Selection in Macroeconomic Forecasting with Many Predictors, *Econometrics and Statistics*, Vol. 36, 19-36. https://doi.org/10.1016/j.ecosta.2023.01.003

- Berg, E., Chen, S. and **Yu, C**. (2025), Combining Probability and Non-probability Samples Using Semi-parametric Quantile Regression and a Non-parametric Estimator of the Participation Probability, *Scandinavian Journal of Statistics*, Vol 52 (4), 2128-2151. https://doi.org/10.1111/sjos.70020

- Li, E., Ma, G.*, Wang, S. and **Yu, C.** (2026) [***alph.***], Fundamental Anomalies, *Management Science*, Vol. 72(2), 1636-1657. https://doi.org/10.1287/mnsc.2023.01313

- Jang, D.*, **Yu, C.,** and Zhu, Z. (2026), Estimating Total Acres of Rangeland for Specific Geographies Using Cropland Data Layer (CDL), *Journal of Survey Statistics and Methodology*. https://doi.org/10.1093/jssam/smaf049

- Hu, M.*, **Yu, C.,** Zhu, Z., McCord, S. and Metz, L. (2026), Estimating Grazing Land Acres for Desired Geographies Using Machine Learning Methods, *Remote Sensing*, 2026, *18*(7), 1050. https://doi.org/10.3390/rs18071050

- Chen, Z.*, Li, H., Ma, G.* and **Yu, C.** (2026) **[*alph.*],** Predicting Extreme Stock Returns in the Cross Section: Machine Learning with Bayesian Optimization, forthcoming *Journal of Banking and Finance*.

(b) Other Refereed Publications:

- **Yu, C.** (2013), Generalized Estimating Equations Second Edition by Hardin, J. and Hilbe, J., *Journal of American Statistical Association,* 108 (504): 1553.

- Pender, J., Kuhns, M., **Yu, C**., Larson, J. and Huck, S. (2023), Linkages Between Rural Community Capitals and Health Care Provision: Findings of a Survey of Small Rural Towns in Three U.S. Regions, *Economic Information Bulletin*, No. 251, USDA, Economic Research Service. https://www.ers.usda.gov/publications/pub-details?pubid=106138

(c) Articles Under Revision or Review:

- Stuart, M*, **Yu, C.** and Hennessy, D. (2026), The Impact of Stocks on Correlations of Crop Yields and Prices and on Revenue Insurance Premiums using Semiparametric Quantile Regression, resubmitted after the 2nd revision to *American Journal of Agricultural Economic*. https://arxiv.org/abs/2308.11805

- Li, H., Ma, G.* and **Yu, C.** (2026) [***alph.***], Cross-Sectional Analysis of Conditional Stock Returns: Quantile Regression with Machine Learning, under revision and resubmission to *Journal of Financial Econometrics*.

- Follett, L.*, Kou, S., and Stuart, M.*, and **Yu, C.** (2026) [***alph.***], Inverse Leverage Effect for Cryptocurrencies and Meme Stocks: a Comprehensive Framework, resubmitted after revision to *Management Science*. SSRN https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4284817

- Li, H., Li, T. and **Yu, C.** (2026) [***alph.***], Optimal Monetary Policy and Term Structure in a Continuous-Time DSGE Model, submitted to *Journal of Monetary Economics*.

(d) Articles in Preparation:

- Causal Inference Under Missing not at Random Assumption Using Quantile Regression Imputation (with Ma, G.*)

- Combining Probability and Non-probability Samples Under Not Missing at Random Assumption (with Berg, E., and Chen, S.)

- Quantile Regression and Machine Learning in Options Trading: Unraveling Risk Differences between Physical and Risk-Neutral Densities in the S&P 500 Index (with Li, Y* and Li, H.)

- A-Optimal Split Questionnaire Designs for Multivariate Continuous Variables (with Jang, D.* and Zhu, Z.)

(V) GRANT AWARDS

- National Institute of Food and Agriculture (NIFA), Economics, Markets and Trade
  PI, (subaward from UW Madison) Economics, Markets and Trade. "Understanding the Meat Supply Chain Network: The Impact of Supply Disruptions on Food Insecurity and Nutritional Inequality", $129,000, 2025-2028.

- U.S. Wheat Associates
  PI, "USW Crop Quality Sample Collection and Weighting Analysis", $24,636, 2025-2026.

- U.S. Department of the Interior Bureau of Land Management (BLM)
  PI, Bureau of Land Management. "Statistical Support for the BLM Landscape Monitoring Framework", $410,000, 2025-2026.
  PI, Bureau of Land Management. "Statistical Support for the BLM Landscape Monitoring Framework", $410,000, 2024-2025.
  PI, Bureau of Land Management. "Statistical Support for the BLM Landscape Monitoring Framework", $410,000, 2023-2024.
  PI, Bureau of Land Management. "Statistical Support for the BLM Landscape Monitoring Framework", $385,000, 2022-2023.
  PI, Bureau of Land Management. "Statistical Support for the BLM Landscape Monitoring Framework", $395,000, 2021-2022.
  PI, Bureau of Land Management. "Statistical Support for the BLM Landscape Monitoring Framework", $1,750,000, 2013-2019.

- USDA Natural Resources Conservation Service (NRCS)

PI, Resource Inventory and Assessment Division. “Development of Point Re-Weighting at Various Scales for CEAP-Grazing Land project”, $250,000, 2022-2023.
PI, Resource Inventory and Assessment Division. “Development of Point Re-Weighting at Various Scales for CEAP-Grazing Land project”, $100,000, 2021-2022.
PI, Resource Inventory and Assessment Division. “Development of Point Re-Weighting at Various Scales for CEAP-Grazing Land project”, $100,000, 2020-2021.
PI, Resource Inventory and Assessment Division. “Development of Point Re-Weighting at Various Scales for CEAP-Grazing Land project”, $100,000, 2019-2020.

- USDA Agricultural Research Service (ARS)
  PI, ARS Jornada Experimental Range. “Design, Implementation, Integration, and Analysis for the Bureau of Land Management Landscape Monitoring Framework”, $315,000, 2019-2021.

- USDA Natural Resources Conservation Service (NRCS)
  Co-PI, USDA Natural Resources Conservation Service. (PI: Z. Zhu), “Statistical and Survey Methods Support for the National Resources Inventory”, $ 4,000,000 per year, 2020-2026. 25% effort.
  Co-PI, USDA Natural Resources Conservation Service. (PI: Z. Zhu), “Statistical and Survey Methods Support for the National Resources Inventory”, $ 6,777,450, 2017-2020. 25% effort.

- National Center for Food and Agricultural Policy
  Co-PI, National Center for Food and Agricultural Policy (PI: Z. Zhu), “Pet Ownership and Demographic Surveys", $361,361, 2016-2018. 30% effort

- USDA Economic Research Service (ERS)
  PI, USDA Economic Research Service. “Survey on Rural Community Wealth and Health Care Provision”, $40,000, 2015-2016.

- USDA Natural Resources Conservation Service (NRCS)
  Co-PI, USDA Natural Resources Conservation Service. (PI: Z. Zhu), “Statistical and Survey Methods Support for the National Resources Inventory”, $ 9,500,000, 2014-2017. 25% effort.

- USDA Natural Resources Conservation Service (NRCS)
  Co-PI, USDA Natural Resources Conservation Service. (PI: E. Berg), “Statistical and Survey Methods Support for the Conservation Effects Assessment Project”, $500,000, 2013-2016. 33% effort.

- USDA Natural Resources Conservation Service (NRCS)
  Co-PI, USDA Natural Resources Conservation Service. (PI: S. Nusser), “Developing Integrated Grazinglands Surveys”, $150,000, 2012-2013. 80% effort.

- USDA Natural Resources Conservation Service (NRCS)

Co-PI, USDA Natural Resources Conservation Service. (PI: Z. Zhu), "Statistical and Survey Methods Support for the National Resources Inventory", $ 8,200,000, 2011-2014. 15% effort.

- USDA National Agricultural Statistics Service (NASS)
  Co-PI, USDA National Agricultural Statistics Service. (PI: J. Kim), "New Approaches for Area Frame Development, Area Sample Design, and Geospatial Data Collection", $1,019,050, 2011-2016. 25% effort.

- USDA Economic Research Service (ERS)
  PI, USDA Economic Research Service. "Effects of Community Assets on Rural Business Development", $689,873, 2010-2015.

- USDA National Agricultural Statistics Service (NASS)
  Co-PI, USDA National Agricultural Statistics Service. (PI: J. Kim), "New Approaches for Area Frame Development, Area Sample Design, and Geospatial Data Collection", $50,000, 2010-2013. 25% effort.

- USDA Natural Resources Conservation Service (NRCS)
  Co-PI, USDA Natural Resources Conservation Service. (PI: S. Nusser), "Statistical and Survey Methods Support for the National Resources Inventory", $15,015,387, 2005-2011. 25% effort.

(VI) TEACHING EXPERIENCE

- Stat 226: *Introduction to Business Statistics*
  An undergraduate level course on Business Statistics
  – Fall 2005, Fall 2007, Fall 2008, Fall 2012, Spring 2017, Fall 2017, Fall 2019, Spring 2022, Fall 2023, Fall 2024, Spring 2025

- Stat 421 or Stat 473/573: *Survey Sampling Techniques*
  A major undergraduate/nonmajor graduate course on survey sampling designs
  – Spring 2006, Spring 2007, Spring 2009, Spring 2011, Spring 2012, Spring 2013, Spring 2014, Spring 2015, Spring 2019, Spring 2021, Spring 2023, Spring 2024

- Stat 521: *Theory and Application of Survey Sampling*
  A graduate level course on the practical aspects and basic theory of design and estimation in sample surveys for finite populations
  – Spring 2008, Spring 2010, Spring 2011

- Stat 401A or Stat 587A (Ag & Vet): *Statistical Methods for Research Workers*
  A nonmajor graduate course about applied statistical tools used in Agricultural and Veterinary Science
  – Spring 2016, Spring 2017

- Stat 401B or Stat 587B (Social Sciences): *Statistical Methods for Research Workers*

A nonmajor graduate course about applied statistical tools used in Social Sciences – Spring 2018, Spring 2020

- Stat 5101 (Engineering): *Statistical Methods for Data Analysis*
  A nonmajor graduate course about applied statistical tools used in Engineering – Fall 2025

- Stat 690A: *Mathematical Finance: Continuous Time Asset Pricing Models*
  A Ph.D. level advanced course on mathematical finance and financial statistics – Fall 2018, Fall 2020, Spring 2023

(VII) STUDENT ADVISING

(a) Ph.D. Students Whom I have Advised or I am Advising (count: 15)

- Mingyue Hu, Statistics, in progress.

- Olivia Frazier, Statistics & Economics (Co-major), in progress.

- Siyuan Ding, Statistics, in progress.

- Zheming Cao, Statistics & Computer Science (Co-major), in progress.

- Yuyang Li, Statistics, Ph.D. in Statistics, Summer 2025
  "Methodological contributions to off-policy evaluation under the sample weighting framework and empirical financial analysis using semiparametric machine learning",
  Current Position: Post-doc, Department of Statistics & Data Science, Washington University in St. Louis.

- Guoliang Ma, Statistics, Ph.D. in Statistics, Summer 2023
  "Application of quantile regression in empirical asset pricing and causal inference",
  Current Position: Assistant Professor, The School of Economics and The Chow Institute, Xiamen University.

- Dae Gyu Jang, Ph.D. in Statistics, Spring 2022. (co-advisor: Z. Zhu)
  "Topics on survey statistics, survey designs, and small area estimation"
  Current Position: Postdoctoral researcher, University of Michigan.

- Matthew Stuart, Ph.D. in Statistics, Summer 2022.
  "Statistical applications in actuarial science: From cryptocurrency to meme stocks to crop insurance"
  Current Position: Assistant Professor, Department of Mathematics and Statistics, Loyola University Chicago.

- Zihao Chen, Ph.D. in Statistics, Spring 2022.
  "Applications of machine learning in asset pricing, prediction of extreme returns and

implied volatility surface"
Current Position: Quantitative Associate, Wells Fargo.

- Jiayi Luo, Ph.D. in Statistics, Summer 2022.
"Nowcasting GDP using Bayesian shrinkage approach and identifying implied volatility surface using symbolic regression"
Current Position: Quantitative Finance Analyst, Citi Bank.

- Zhenzhong Wang, Ph.D. in Statistics, Spring 2020 (co-advisor: Z. Zhu)
"High-dimensional time series analysis and its application in economic forecasting."
Current Position: Research Scientist, Eli Lilly.

- Yixiao Zhang, Ph.D. in Statistics, Fall 2019.
"Bayesian analyses of dynamic factor models in nowcasting."
Current Position: Senior Quantitative Analytics Specialist, Wells Fargo.

- Michael Price, Ph.D. in Statistics, Spring 2018.
"Penalized B-splines and their application with an in-depth look at the bivariate tensor product penalized B-splines."
Current Position: Mathematical Statistician, USDA Animal and Plant Health Inspection Service, Veterinary Services.

- Lendie Follett, Ph.D. in Statistics, Spring 2016.
"Bayesian approaches to macroeconomic forecasting."
Current Position: Associate Professor of Business Analytics, Department Chair, and Co-Director of Data Analytics, Drake University.

- Senniang Chen, Ph.D. in Statistics, Spring 2014.
"Imputation of missing values using quantile regression."
Current Position: Senior Process Simulation Scientist, Corning Inc.

- Bin Liu, Ph.D. in Statistics, Summer 2013.
"Estimating multiple treatment effects in two-phase observational data."
Current Position: Data Mining Specialist, Xiaohongshu.

- Wen Li, Ph.D. in Statistics, Spring 2009. (co-advisor: A. Carriquiry, and W. Kliemann)
"Memory structures in stochastic finance models."
Current Position: Principal Research Scientist, Pfizer.

(b) <u>M.S. Students Whom I have Advised or I am Advising (count: 13)</u>

- Lynn Huang, MS in Statistics, expected in Fall 2025.
- Yusi Li, MS in Statistics, MS in Statistics, 2021.
- Minsung Jang, MS in Statistics, 2020.
- Guoliang Ma, MS in Statistics, 2020.
- Matthew Stuart, MS in Statistics, 2019.

- Haiyang Zhang, MS in Statistics, 2018.
- Lawrence Hii, MS in Statistics, 2017.
- Michael Price, MS in Statistics, 2014.
- Miguel Carriquiry, MS in Statistics, 2013.
- Derek Watson, MS in Statistics, 2012.
- Senniang Chen, MS in Statistics, 2011.
- Dongyan Wang, MS in Statistics, 2009.
- Reka Howard, MS in Statistics, 2008.

(c) Undergraduate Students (honor program) (count: 2)

- Sarah Ronnkvist (Advised for her honor course component), Graduated in 2019.
- Ji Ju, Statistics (Advised for her honor project), Graduated in 2013.

(d) Ph.D. Committee (count: 70+)

(e) Master Committee (count: 20+)

(VIII) PRESENTATIONS

(a) Invited Presentations

- "Combining Probability and Non-probability Samples Using Semi-parametric Quantile Regression and a Non-parametric Estimator of the Participation Probability", Department of Biostatistics, Columbia University, May 2026.

- "Estimation of Treatment Effects Using Quantile Regression under MNAR", Department of Statistics and Data Science, Carnegie Mellon University, April 2026.

- "Combining Probability and Non-probability Samples Using Semi-parametric Quantile Regression and a Non-parametric Estimator of the Participation Probability", Seminar, School of Statistics, Renmin University of China, Beijing, March, 2026.

- "Estimation of Treatment Effects Using Quantile Regression under MNAR", Invited Talk, JSM, Nashville, Tennessee, August 2025.

- "Causal Inference as a Missing Data Problem: Foundations and Extensions", Invited guest speaker, Asian Summer School in Econometrics and Statistics, Xiamen, July 2025.

- "Combining Probability and Non-probability Samples Using Semi-parametric Quantile Regression and a Non-parametric Estimator of the Participation Probability", Invited Talk, the 2nd Joint Conference on Statistics and Data Science, Kunming, China, July 2024.

- "Combining Probability and Non-probability Samples Using Semi-parametric Quantile Regression and a Non-parametric Estimator of the Participation Probability", Invited Talk, the Korean International Statistics Society Summer Conference, Seoul, South Korea, July 2024.

- "Combining Probability and Non-probability Samples Using Semi-parametric Quantile Regression and a Non-parametric Estimator of the Participation Probability", Invited Talk, ICSA Applied Statistics Symposium, Wuhan, China, June 2024.

- "Asset Pricing and its Recent Developments", Invited guest speaker, Asian Summer School in Econometrics and Statistics, Beijing, July 2023.

- "Marginal Treatment Effect Estimation Without Ignorability Using Observational Study", Invited Talk, ICSA Applied Statistics Symposium, Chengdu, China, June 2023.

- "Conditional Return Distributions: Quantile Regression with Machine Learning", Invited Talk, The 5th International Conference on Econometrics and Statistics (EcoSta 2022), Kyoto, Japan, June 2022.

- "Asymmetric Laplace jumps in returns on cryptocurrencies", Invited Talk, 14th International Conference of Computational and Financial Econometrics, Virtual, December 2020.

- "Computation Efficiency for a Split Questionnaire Design", Invited Seminar, Westat, Rockville, MD, August 2019.

- "Quantile Regression Imputation with Missing Covariates and Response Under Non-ignorable Missing", Departmental Seminar, Department of Statistics, Oregon State University, April 2019.

- "Achieving Parsimony in Bayesian VARs using the Horseshoe Prior", The 2nd International Conference on Econometrics and Statistics (EcoSta 2018), City University of Hong Kong, June 2018.

- "Achieving Parsimony in Bayesian VARs using the Horseshoe Prior", 2018 Kansas Econometrics Workshop at the University of Kansas, Lawrence, Kansa, April 2018.

- "Semi-parametric Quantile Regression Imputation for a Complex Survey with Application to the Conservation Effects Assessment Project", Departmental Seminar, Department of Statistics, University of Wisconsin-Madison, Madison, March 2018.

- "Semi-parametric Quantile Regression Imputation for a Complex Survey with Application to the Conservation Effects Assessment Project", Departmental Seminar, Department of Statistics, Purdue University, West Lafayette, Indiana, March 2018.

- "Nowcasting GDP Using Dynamic Factor Models", Annual Symposium on Modern Statistics (invited guest speaker), Xiamen University, China, 2017.

- "Achieving Parsimony in Bayesian VARs using the Horseshoe Prior", 2017 IMS-China International Conference on Statistics and Probability, 2017, Nanning, China.

- "Parameter Estimation through Semiparametric Quantile Regression Imputation", Departmental Seminar, Department of Mathematics, University of South Dakota, 2017.

- "A New Approach of Spatially Balanced Design in Area Sampling", 2015 Federal Committee on Statistical Methodology (FCSM) Research Conference, Washington DC, 2015.

- "Quantile Regression Imputation Implemented in Complex Survey Data", ICSA/Graybill Conference, 2015, Fort Collins, Colorado.

- "Generalized Method of Moments Estimator Based On Semiparametric Quantile Regression Imputation", ICSA Applied Statistics Symposium, Portland, Oregon, 2014.

- "Statistical Modelling in ART", Producer School, Holmes Murphy, Des Moines, 2014.

- "Generalized Method of Moments Estimator Based On Semiparametric Quantile Regression Imputation", IMS Annual Meeting, Sydney, Australia, 2014.

- Sampling and Estimation of the Bureau of Land Management Rangeland Health Survey", 23rd Annual Conference of the International Enviornmentrics Society", Anchorage, Alaska, 2013.

- "Estimating Multiple Treatment Effects Using Two-phase Regression Estimators", Fifth International Conference on Statistics and Society at Renmin University, Beijing, China, 2012.

- "Estimating Multiple Treatment Effects Using Two-phase Regression Estimators", ICSA Applied Statistics Symposium, Boston, MA, 2012.

- "A Measurement Study in a Longitudinal Survey with Errors-in-Variables", TIES Third North American Regional Meeting, La Crosse, WI, 2011.

- "A semi-parametric estimation of mean functionals with non-ignorable missing data", The Eighth ICSA International Conference: Frontiers of Interdisciplinary and Methodological Statistical Research, Guangzhou, China, 2010.

- "A semi-parametric estimation of mean functionals with non-ignorable missing data", Joint Statistical Meeting, Vancouver, Canada, 2010.

- "Empirical Likelihood Estimation and Test Based on Conditional Characteristic Function", 2009 international conference on statistical finance and econometrics, Chengdu, China, 2009.

- "Return Dynamics with Levy Jumps: Evidence from Stock and Option Prices", 2009 ICSA applied statistics symposium, San Francisco, CA, 2009.

- "Return Dynamics with Levy Jumps: Evidence from Stock and Option Prices", Department of Statistics and Actuarial Science, University of Iowa, Iowa City, IA, 2009.

- "Protocol Calibration in the National Resources Inventory", 2007 Federal Committee on Statistical Methodology Research Conference, Arlington, VA, 2007.

- "A Joint Analysis of Return Dynamics with Levy Jumps Using Stock and Option Prices", 17th Annual Derivatives, Securities and Risk Management Conference, Arlington, VA, 2007.

- "A Bayesian Analysis of Time-Changed Levy Processes of Return Dynamics", Seminar on Bayesian Inference in Econometrics and Statistics, Iowa City, IA, 2006.

- "A Joint Analysis of Return Dynamics with Levy Jumps Using Stock and Option Prices", Department of Statistics, Iowa State University, Ames, IA, 2005.

- "A Joint Analysis of Return Dynamics with Levy Jumps Using Stock and Option Prices", School of Business, Virginia Common Wealth University, Richmond, VA, 2005.

- "A Joint Analysis of Return Dynamics with Levy Jumps Using Stock and Option Prices", School of Business, The Hong Kong University of Science & Technology, HongKong, China, 2005.

(b) Contributed Presentations

- "Marginal Treatment Effect Estimation Without Ignorability Using Observational Study", Topic-contributed Talk, JSM, Toronto, August 2023.

- "Achieving Parsimony in Bayesian VARs using the Horseshoe Prior", the third China Meeting of the Econometric Society, Chengdu, China, 2016.

- "Generalized Method of Moments Estimator Based On Semiparametric Quantile Regression Imputation", the 60th ISI World Congress, Rio de janeiro, Brazil, 2015.

- "Imputation of Missing Data Based On Quantile Regressions", International Chinese Statistical Association, Bethesda, MD, 2013.

- "Estimating Multiple Treatment Effects Using Two-phase Regression Estimators", International Chinese Statistical Association, NYC, NY, 2011.

- "Protocol Calibration in the National Resources Inventory", 2008 Joint Statistical Meeting, Denver, Colorado, 2008.

- "Empirical Likelihood Estimation and Test Based on Conditional Characteristic Function", 2008 ICSA Applied Statistics Symposium, Piscataway, New Jersey, 2008.

- "Estimation of Levy Jump Models Under the Risk Neutral and Physical Measure Using Stock and Option Prices", IMS/CSPS Joint Meeting, Beijing, China, 2005.

- "Estimation of Levy Jump Models Under the Risk Neutral and Physical Measure Using Stock and Option Prices", Financial Engineering Workshop, Cornell University, Ithaca, NY, 2004.

- "A Bayesian Analysis of Time-Changed Levy Processes of Return Dynamics", 2004 IMS Annual Metting/6th Bernoulli Congress, Barcelona, Spain, 2004.

- "A Bayesian Analysis of Time-Changed Levy Processes of Return Dynamics", ICSA Annual Applied Statistics Symposium, San Diego, CA, 2004.

- "A Bayesian Analysis of Time-Changed Levy Processes of Return Dynamics", CIRANO-CIREQ Financial Econometrics, Montreal, Canada, 2004.

- "A Bayesian Analysis of Time-Changed Levy Processes of Return Dynamics", Department of Statistical Science Seminar, Cornell University, Ithaca, NY, 2004.

(IX) HONORS & AWARDS

- College of Liberal Arts and Sciences Award for Outstanding Achievement in Extension or Professional Practice (2024-2025), Iowa State University
- Laha Award (2004), Institute of Mathematical Statistics
- Best Student Paper Award (2004), International Chinese Statistical Association
- Graduate School Fellowship (2003, 2004), Cornell University.

(X) SERVICES

(a) Departmental Committees (Statistics) or University Committees

- Seminar Chair: 2012 Fall, 2016 Fall, 2019 Spring
- Ph.D. & M.S. Prelim Exam Committee: 2009 question writer, 2010-2011 member, 2012 question writer, 2014 question writer, 2016 question writer, 2017 question writer, 2018 question writer, 2019 member, 2020 member
- Reading Room Committee: 2007-2008 member, 2008-2010 chair
- Social Committee: 2006-2007 chair

- Admission Committee: 2006-2007 member, 2015-2016 member, 2016-2017 member, 2017-2018 member
- Diversity Committee: 2005-2007 and 2009-2011 member, 2007-2008 and 2012-2013 chair
- Snedecor Remodeling Committee: 2007-2009 member
- Faculty Search Committee
    - Stat Chair Search Committee, 2012-2013 member, 2013-2014 member
    - Stat-Math Joint Position Search Committee, 2013-2014 member
    - Stat Applied Probability Search Committee, 2014-2015 member
    - Stat-CSAFE Position Search Committee, 2016-2017 member
    - Stat-Data Science Position Search Committee, 2019-2020 member
- Honors & Awards Committee: 2014-2015 member, 2022-2023 member, 2023-2024 member
- Adviser for STATCOM: 2012-2016
- Adviser for STAT-ers: 2017-2020
- Curriculum Committee: 2020-2021 member
- Diane Brandt Scholarship Nomination Evaluation, ISU Graduate College: 2016, 2017, 2018
- Distinguished Lectures Committee: 2021-2023 chair, 2023-2024 member
- 75th Anniversary Celebration Committee: 2022-2023 member, 2023-2024 member
- Undergraduate Recruitment Committee: 2021-2022 member, 2025-2026 member
- Peer Review of Teaching Committee: 2023-2024 chair, 2024-2025 chair, 2025-2026 member
- Chair Reappointment Committee: 2023-2024 Chair
- Advisory Committee on Promotion and Tenure: 2024-2025 member, 2025-2026 member
- Digital Accessibility Committee: 2025-2026 member

(b) <u>Committee of Professional Statistical Organizations</u>

- Chair, ASA Business and Economic Statistics Section: 2027-2028
- Chair-Elect, ASA Business and Economic Statistics Section: 2026-2027
- ASA Survey Review Committee Member: 2020 – present
- ASA Student Travel Award Committee (Business and Economics Session): 2015 – 2019
- ASA Publication Officer (Business and Economic Statistics Section): January of 2014 – December of 2016
- JASA/TAS Review Associate Editor: January of 2013 – January of 2014
- ASA Edward C. Bryant Scholarship Committee: January of 2012 – December of 2014

(c) <u>Conference Organization</u>

- Session Chair, Invited Session on Survey Statistics, Conference Celebrating the 75th anniversary of the Statistical Laboratory, Department of Statistics and Statistical Laboratory, Iowa State University, Ames IA (June 2009).
- Session Chair, Invited Session on Financial Statistics, International Chinese Statistical Association Applied Symposium, Piscataway, New Jersey (June 2008).

(d) Refereeing for Journals

- Journal of the American Statistical Association
- Journal of Financial Econometrics
- Survey Methodology
- Annals of Applied Statistics
- Journal of Official Statistics
- Australian and New Zealand Journal of Statistics
- Statistical Science
- Statistica Sinica
- Statistics and Its Inference
- Statistics and Probability Letters
- Mathematical Finance
- Journal of Nonparametric Statistics
- Journal of Survey Statistics and Methodology

(e) Refereeing for Grant Panel

- Invited NSF Panel Review: DMS, March of 2025.
- Invited External Reviewer for the Research Fellow Scheme and Senior Research Fellow Scheme of the Research Grants Council: Social Sciences and Business Studies Selection Panel, April of 2021.
- Invited NSF Panel Review (external expert): Social and Economic Sciences - Methodology, Measurement, and Statistics, May of 2015.
- Invited NSF Panel Review (external expert): Social and Economic Sciences - Methodology, Measurement, and Statistics, December of 2013.
- Invited NSF Panel Review (external expert): Social and Economic Sciences - Methodology, Measurement, and Statistics, December of 2012.
- Invited NSF Panel Review: Social and Economic Sciences - Methodology, Measurement, and Statistics, December of 2010.

(f) Membership in Professional Organization

- American Statistical Association
- Institute of Mathematical Statistics
- International Chinese Statistical Association

(g) Synergistic Activities

- Faculty adviser of undergraduate honor program, mentoring two Statistics undergraduate female students for their honor programs, June 2012 – May 2013, January 2019 – May 2019.

- Faculty mentor for the Research Experiences for Undergraduates (REU) program sponsored by the NSF, organized by the Mathematics and Statistics Department of Iowa State University, Summer of 2009.