#### Cindy L. Yu Professor Department of Statistics Center of Survey Statistics and Methodology Iowa State University

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#### (I) EDUCATION

Ph.D., Statistics	Cornell University,	May 2005
M.S., Statistics	Ithaca, NY Cornell University,	May 2002
wi.s., statistics	Ithaca, NY	Way 2002
M.S., Statistics	University of Minnesota,	May 2000
	Twin Cities, MN	T 1 1005
<b>B.S.</b> , Mathematics	Sichuan University,	July 1995
	China	
(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

<u>Mathematical Finance</u>: modelling jump processes in continuous-time asset pricing models; modelling dynamic stochastic general equilibrium

<u>Survey Statistics</u>: semiparametric quantile regression imputation method under ignorable and non-ignorable missing

<u>Time Series Analyses</u>: Bayesian shrinkage priors used in vector autoregressive models; Bayesian analyses of dynamic factor models in nowcasting

<u>Causal Inference</u>: 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) <u>Referred Journal Publications:</u>
  - 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 nonignorable 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 Twophase 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, *Journal of Mathematics*, Vol. 9, No. 22, 2865, <u>https://doi.org/10.3390/math9222865</u>.
- 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. <u>https://doi.org/10.1016/j.ecosta.2021.08.009</u>.
- 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. <u>https://doi.org/10.1080/03610918.2019.1697819</u>
- 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. <u>https://doi.org/10.5705/ss.202020.0053</u>
- Wang, Z\*, Zhu, Z and Yu, C. (2023), Variable Selection in Macroeconomic Forecasting with Many Predictors, forthcoming *Econometrics and Statistics*. <u>https://doi.org/10.1016/j.ecosta.2023.01.003</u>
- Luo, J.\* and Yu, C. (2023), The Application of Symbolic Regression on Identifying Implied Volatility Surface, *Journal of Mathematics*, Vol. 11, No. 9, 2108. <u>https://doi.org/10.3390/math11092108</u>
- (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. <u>https://ers.usda.gov/webdocs/publications/106139/eib-251.pdf?v=2231.4</u>
- (c) Articles Under Revision or Review:
  - Follett, L.\*, Kou, S., and Stuart, M.\*, and Yu, C. (2023) [*alph.*], Inverse Leverage Effect for Cryptocurrencies and Meme Stocks: a Comprehensive Framework, under revision and resubmitted for *Management Science*. SSRN <a href="https://papers.ssrn.com/sol3/papers.cfm?abstract\_id=4284817">https://papers.ssrn.com/sol3/papers.cfm?abstract\_id=4284817</a>.

- Li, E., Ma, G.\*, Wang, S. and Yu, C. (2023) [*alph.*], Fundamental Anomalies, under revision and resubmitted for *Management Science*. SSRN <a href="https://papers.ssrn.com/sol3/papers.cfm?abstract\_id=3783526">https://papers.ssrn.com/sol3/papers.cfm?abstract\_id=3783526</a>.
- Garman, S., Li, Y.\* and **Yu, C.** (2023), A Composite Estimator to Combine Bureau of Land Management Rangeland Monitoring Surveys: An Example Comparing Land-Health Between Wyoming's Greater Sage-Grouse Core and NonCore Areas, under revision and resubmitted for *PLOS ONE*.
- Stuart, M\*, **Yu, C.** and Hennessy, D. (2023), The Impact of Stocks on Correlations of Crop Yields and Prices and on Revenue Insurance Premiums using Semiparametric Quantile Regression, under revision and resubmitted for *American Journal of Agricultural Economic* https://arxiv.org/abs/2308.11805
- Chen, Z.\*, Li, H., Ma, G.\* and **Yu, C.** (2023) [*alph.*], Predicting Extreme Stock Returns in the Cross Section: Machine Learning with Bayesian Optimization, submitted to *Review of Financial Studies*.
- Li, H., Li, T. and **Yu, C.** (2023) [*alph.*], Optimal Monetary Policy and Term Structure in a Continuous-Time DSGE Model, submitted to *Journal of Monetary Economics*.
- Berg, E., Chen, S. and **Yu, C**. (2023), Combining Probability and Non-probability Samples Using Semi-parametric Quantile Regression and a Non-parametric Estimator of the Participation Probability, submitted to *Journal of the Royal Statistical Society, Series A*.

## (d) Articles in Preparation:

- Causal Inference Under Missing not at Random Assumption Using Quantile Regression Imputation (with Ma, G.\* and Wang, Z.)
- Cross-Sectional Analysis of Conditional Stock Returns: Quantile Regression with Machine Learning (with Ma, G.\* and Li, H.)
- 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.)
- Determining Control Total Acres for Desired Geographies Using Cropland Data Layer (CDL) (with Jang, D\* and Zhu, Z.)

## (V) **GRANT AWARDS**

- USDA Natural Resources Conservation Service (NRCS)
  PI, Resource Inventory and Assessment Division. "Development of Point Re-Weighting at Various Scales for National Resource Inventory Grazing Land", \$200,000, 2023-2024.
  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, 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, 2020-2021.
  PI, Resource Inventory and Assessment Division. "Development of Point Re-Weighting at Various Scales for CEAP-Grazing Land project", \$100,000, 2020-2021.
- 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, 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", \$395,000, 2021-2022.
  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 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", \$ 7,000,000, 2020-2023. 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

- 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 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 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: 14)

- Yuyang Li, Statistics, in progress.
- Mingyue Hu, Statistics, in progress.
- 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: Quantitative Associate, 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) M.S. Students Whom I have Advised or I am Advising (count: 13)

- Lynn Huang, MS in Statistics, expected 2023.
- 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) <u>Undergraduate Students (honor program) (count: 2)</u>

- 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: 49)

- Chaoya Feng (Ph.D., Economics, not yet)
- Xiaoguang Feng (Ph.D. Economics, not yet)
- Yue Zhao (Ph.D., Economics, not yet)
- Zirou Zhou (Ph.D., Statistics, not yet)
- Yiming Bian (Ph.D., ECPE, not yet)
- Yawei Ge (Ph.D., Statistics, not yet)
- Hao Wang (Ph.D., Statistics, not yet)
- Yonghyuan Kwon (Ph.D., Statistics, not yet)
- Mahendra Kumar Singh (Ph.D., Economics, not yet)
- Xuche Gong (Ph.D., Economics, not yet)
- Fangshu Ye (Ph.D., Statistics, 2023)
- Yanghyeon Cho (Ph.D., Statistics, 2023)
- Oranuch Wongpiyabovorn (Ph.D., Economics, 2023)
- Qihao Zhang (Ph.D., Statistics, 2022)
- Sepideh Mosaferi (Ph.D., Statistics, 2022)
- Hyoungji Kim (Ph.D., Mathematics, 2022)
- Ju-Heung Kim (Ph.D., Statistics, 2022)
- Gang Han (Ph.D., Statistics, 2022)
- Hengfang Wang (Ph.D., Statistics, 2021)
- Xiaoshi Guo (Ph.D., IMSE, 2021)
- Yifan Zhu (Ph.D., Statistics, 2021)
- Feng Zhao (Ph.D., Human Development Family Study, 2020)

- Shaobai Jiang (Ph.D., Economics, 2020)
- Ju Ji (Ph.D., Statistics, 2020)
- Tianyang Zhang (Ph.D., Economics, 2020)
- Hai Jiang (Ph.D., Physics, 2019)
- Manman Qian (Ph.D., English, 2018)
- Linkai Li (Ph.D., Aerospace Engineering, 2018)
- Hejian Sang (Ph.D., Statistics, 2018)
- Yang He (Ph.D., Economics, 2018)
- Samantha Tyner (Ph.D., Statistics, 2017)
- Xiaoguang Feng (Ph.D., Economics, 2017)
- Wenwen Xi (Ph.D., Economics, 2017)
- Chao Li (Ph.D., Economics, 2016)
- Dong Zhang (Ph.D., Human Development Family Study, 2016)
- Huawei Jiang (Ph.D., Electrical Engineering, 2016)
- Lisha Li (Ph.D., Economics, 2015)
- Jongho Im (Ph.D., Statistics, 2015)
- Shan Yang (Ph.D., Statistics, 2014)
- Minsun Riddles (Ph.D., Statistics, 2013)
- Sixia Chen (Ph.D., Statistics, 2012)
- Nicholas Beyler (Ph.D., Statistics, 2010)
- Kanlaya Barr (Ph.D., Economics, 2009)
- Jittinan Aukayanagul (Ph.D., Economics, 2009)
- Lifeng You (Ph.D., Statistics, 2009)
- Xiaodong Du (Ph.D., Economics, 2008)
- Chengyong Tang (Ph.D., Statistics, 2008)
- Lixia Diao, (Ph.D., Statistics, 2008)
- Jennifer Huckett (Ph.D., Statistics, 2008)
- (e) Master Committee (count: 23)
  - Shigeke Kanamori (MS, Statistics, not yet)
  - Ying Zheng (MS, Statistics, not yet)
  - Zhenzhen Chen (MS, Statistics, 2019)
  - Steven Harms (MS, Statistics, 2019)
  - Xin Zhang (MS, Statistics, 2018)
  - Dinesh Poddaturi (MS, Statistics, 2018)
  - He Jiang (MS, Statistics, 2018)
  - Dong Zhang (MS, Statistics, 2016)
  - Min Ren (MS, Statistics, 2016)
  - Crystal Peoples (MS, Sociology, 2015)
  - Angela Stone (MS, Public Administration, 2015)
  - Cheng Peng (MS, Statistics, 2015)
  - Yan Huang (MS, Statistics, 2013)
  - Ge Wang (MS, Journalism and Mass Communication, 2013)

- Ying Wei (MS, Political Science, 2013)
- Zhenxing Ke (MS, Statistics, 2013)
- Guangyu Liu (MS, Statistics, 2011)
- Cheng Peng (MS, Public Administration, 2011)
- Yan Wang (MS, Statistics, 2010)
- Kim Young (MS, Statistics, 2009)
- Feng Wei (MS, Community and Regional Planning, 2009)
- Yao Chang (MS, Journalism and Mass Communication, 2008)
- Penglai Li (MS, Electrical Engineering, 2006)

## (VIII) PRESENTATIONS

- (a) Invited Presentations
  - "Marginal Treatment Effect Estimation Without Ignorability Using Observational Study", Topic-contributed Talk, JSM, Toronto, August 2023.
  - "Asset Pricing and its Recent Developments", Invited to give a series of presentations, 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 5<sup>th</sup> 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 Nonignorable Missing", Departmental Seminar, Department of Statistics, Oregon State University, April 2019.
  - "Achieving Parsimony in Bayesian VARs using the Horseshoe Prior", The 2<sup>nd</sup> 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", 23<sup>rd</sup> Annual Conference of the International Environmentrics 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", 17<sup>th</sup> 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

- "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 60<sup>th</sup> 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/6<sup>th</sup> 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) CONSULTING EXPERIENCE

- (a) <u>Statistical Consulting for National Agencies</u>
  - Bureau of Land Management:
  - Natural Resources Conservation Service
  - Economic Research Service
  - National Agricultural Statistics Service
  - National Center for Food and Agricultural Policy:
- (b) <u>Statistical Consulting at University Level and Community level</u>
  - ISU Daily Readership Survey:

- ISU Faculty Activity Survey (three times)
- CyRide Survey
- ISU Student Health Assessment
- ISU STATCOM Ames Public Library Survey
- ISU Vet Med Survey Bovine Viral Diarrhea (BVD) Cow Disease
- Center for Industrial Research and Service (CIRAS) Bio-Product Survey
- Center for Industrial Research and Service (CIRAS) Bio-Product Index Pilot Survey
- ISU Political Science Professors
- Holmes Murphy ART Assessment
- American Pop Corn Panel Survey
- ISU Parks Library

# (X) HONORS & AWARDS

- Laha Award (2004). Institute of Mathematical Statistics
- Best Student Paper Award (2004), International Chinese Statistical Association
- Graduate School Fellowship (2003, 2004), Cornell University.

# (XI) 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
  - o Stat Chair Search Committee, 2012-2013 member, 2013-2014 member
  - o 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
- 75<sup>th</sup> Anniversary Celebration Committee: 2022-2023 member, 2023-2024 member
- Undergraduate Recruitment Committee: 2021-2022 member
- Peer Review of Teaching Committee: 2023-2024 chair
- Chair Reappointment Committee: 2023-2024 Chair

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

- 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
- Open Statistics Journal Associate Editor: January of 2022 Present

# (c) Conference Organization

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

# (d) <u>Refereeing for Journals</u>

- 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

## (e) <u>Refereeing for Grant Panel</u>

• 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) <u>Membership in Professional Organization</u>

- 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.