# YAJUAN SI

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Education Duke University, Department of Statistical Science, Durham, North Carolina, USA

Ph.D., Statistical Science, 2012; M.S., Statistical Science 2011

Advisor: Jerome P. Reiter

Thesis: Nonparametric Bayesian Methods for Multiple Imputation of Large Scale Incomplete Cate-

gorical Data in Panel Studies

Renmin University of China, School of Statistics, Beijing, P.R.China

B.S., Statistics & Actuarial Science, 2008

The University of Hong Kong, Department of Statistics & Actuarial Science, Hong Kong

Exchange Student, Statistics & Actuarial Science, 2007

Professional University of Michigan, Ann Arbor, MI

Experience Research Associate Professor (with tenure)

Sept 2022 -

Nov 2019 -

Survey Methodology Program, Survey Research Center, Institute for Social Research & Department

of Biostatistics, School of Public Health

Research Assistant Professor Sept 2017 - Aug 2022

Member, Institute for Healthcare Policy & Innovation Jan 2018 - Affiliate, Population Dynamics and Health Program May 2019 - Faculty Associate, Population Studies Center May 2019 -

Affiliate, Michigan Center on the Demography of Aging  $May\ 2019$  -

Affiliate, Michigan Institute for Data Science

University of Maryland, College Park, MD

Teaching faculty, Joint Program in Survey Methodology Sept 2019 -

National Institute of Statistical Sciences

Research Fellow  $Feb\ 2020$  -

University of Wisconsin-Madison, Madison, WI

Visiting Assistant Professor, Department of Population Health Sciences Sept 2017 - Sept 2022

Assistant Professor (tenure track), Department of Biostatistics & Medical Informatics and Depart-

ment of Population Health Sciences Aug 2014 - Aug 2017

Affiliate, University of Wisconsin Survey Center Feb 2015 - Aug 2017

Affiliate, Center for Demography and Ecology Oct 2015 - Aug 2017

Affiliate, Department of Statistics

Nov 2015 - Aug 2017

Columbia University, New York, NY

Postdoctoral Research Scholar (Supervisor: Andrew Gelman) Aug 2012 - Jul 2014

Educational Testing Service, Princeton, NJ

Summer Intern (Mentors: Matthias Von Davier and Xueli Xu)

Jun 2010 - Aug 2010

Duke University, Durham, NC

Research Assistant, Department of Statistical Science

Jan 2009 - July 2012

# Awards and Honors

- Discussion panelist in the HEAL/NIDA Workshop on substance use disorder recovery within the socioenvironmental context, 2024
- Protocol review board member of CTN-0146 Adolescent Post-operative opioid EXposure (APEX)
   for the Clinical Trials Network in the National Institute on Drug Abuse, 2024
- Honorable nomination of the ACUM Outstanding Advisor Award, University of Michigan, 2023
- Panel member on An Integrated System of Household Income, Wealth, and Consumption Data and Statistics to Inform Policy and Research, National Academies of Sciences, Engineering, and Medicine, Committee on National Statistics, 2022-2024
- Population Dynamics and Health Program's New Investigator Intensive Mentoring Program, University of Michigan, 2018
- Performance Bonus Fund, University of Wisconsin-Madison, 2017
- Women in Statistics and Data Science Conference-Travel Award, 2016
- The Institute of Mathematical Statistics (IMS) Junior Researcher Conference-Travel Award, 2015
- The annual meeting of the International Biometric Society-Eastern North American Region (ENAR) Junior Investigator Workshop-Travel Award, 2015
- Frontiers of Hierarchical Modeling in Observational Studies, Complex Surveys and Big Data-Travel Award funded by NSF, 2014
- OBayes 2013 Meetings: Celebrating 250 Years of Bayes-Travel Award, 2013
- International Workshop on Objective Bayes Methodology-Travel Award, 2011

# Funded Grants Principal Investigator (External Funding)

1. NSF/MMS SES 2217456 08/15/2022-07/31/2025 0.83 Calendar

Total Award Amount: \$62,973

Enhancing Synthetic Data Techniques for Practical Applications

UM Co-PI (PI: J Reiter at Duke University)

2. NIH/NIMHD U01MD017867 04/01/2022-12/31/2025 3.00 Calendar

Total Award Amount: \$2,305,764

Statistical Adjustments of Sample Representation in Community-level Estimates of COVID-19 Transmission and Immunity

3. NIH/SBECCC 03/01/2022-02/28/2023 0.61 Calendar

Total Award Amount: \$15,000

Examination of Health Disparity and its Social Determinants for Vulnerable Populations of COVID Transmission

4. NIH/NIDA U24DA055325

10/01/2021 - 09/30/2026

1.20 Calendar

Total Award Amount: \$143,731

The Healthy Brain and Child Development National Consortium Administrative Core

UM Subcontract PI (PI: C Chambers at University of California, San Diego)

5. NIH/NICHD R21HD105204

05/01/2021-04/30/2024

2.40 Calendar

Total Award Amount: \$400,166

Novel Approaches to Adjusting for Population Heterogeneity and Representation in Neuroimaging

Studies

6. NISS/NCES

01/01/2020-06/30/2024

2.40 Calendar

Total Award Amount: \$298,450

Nonresponse Bias Adjustment for Large-scale Education Surveys

7. USDA 10/01/2018-09/30/2023

0.36 Calendar

Total Award Amount: \$74,950

Methodological Research on Mobile Technology in the Collection of Household Food Expenditure –

Data

8. University of Wisconsin Survey Center

09/01/2018-08/31/2020

1.20 Calendar

Total Award Amount: \$34,904

Academic Support Services Agreement: MIDUS Early Warning Project (U19 funded by NIA)

9. NIH/NIDDK R21DK110688

08/01/2016-07/31/2019

2.40 Calendar

Total Award Amount: \$227,775

Profiling Missing Data in Electronic Health Records for Diabetes Care Research

10. NIH/NIDDK R01DK108073

04/01/2016-03/31/2021

0.96 Calendar

Total Award Amount: \$16,969

Statistical Methods for Healthcare in Complex Patients with Diabetes

UM Subcontract PI (PI: Y Zhao at Fred Hutchinson Cancer Research Center)

11. NSF/MMS SES 1760133

10/01/2015-09/30/2020

1.92 Calendar

Total Award Amount: \$442,195

Multilevel Regression and Poststratification: A Unified Framework for Survey Weighted Inference

#### Principal Investigator (Internal Funding)

12. NIH/NIA/MiCDA

07/01/2020-06/30/2025

1.20 Calendar

Total Award Amount: \$3,773,851 (to MiCDA)

Confidentiality Protection after Record Linkage: Laying the Groundwork for Synthetic Record Link-

age

13. UM/MIDAS 05/15/2020-12/31/2020 1.34 Calendar

Total Award Amount: \$29,968

Estimating County-level Age Group Contact Rates from Time Use Data

14. UM/MIDAS 01/01/2020-03/31/2023 0.87 Calendar

Total Award Amount: \$90,000

Regularized Regression and Poststratification: Blending Data Science and Survey Methodology to

Increase the Reproducibility of Population Genetics Research

15. UM/PSC 05/01/2018-05/01/2019 1.00 Calendar

Population Dynamics and Health Program's New Investigator Intensive Mentoring Program

# Co-Investigator (External Funding)

16. USDA 09/28/2023-09/27/2026 0.12 Calendar

Total Award Amount: \$89,000

Statistical and Methodological Research in Support of FoodAPS-2 Survey Development (PI: B West)

17. NIH/NIA R01 01/01/2022-12/31/2022 0.96 Calendar

Total Award Amount: \$1,579,916

Assessing the Interactive Effect of Lifetime and Old Age Cognitive Engagement on Cognitive Decline and Dementia: Cognitive Reserve versus Use it or Lose it (MPIs: B Helppie-McFall and K Langa)

18. NSF BCS 2023639 10/01/2020-09/30/2025 0.60 Calendar

Total Award Amount: \$1,499,636

HNDS-I: Decennial Census Linkage Project (PI: T Alexander)

19. NIH/NIDDK R01 DK121709-02 04/01/2020-03/31/2025 0.60 Calendar

Total Award Amount: \$3,809,089

Real-world Effectiveness of Preventive Pharmacological Therapy for Patients with Kidney Stones (PI: J Hollingsworth)

20. NIH/NIDA R01 DA031160-08 04/01/2019-03/31/2022 0.60 calendar

Total Award Amount: \$1,076,400

Trajectories of Nonmedical Prescription Drug Misuse (PI: S McCabe)

21. AHRQ R01 HS024728-03 02/01/2019-04/30/2021 1.20 Calendar

Total Award Amount: \$1,557,555

Will the Reach of ACOs Extend to Speciality Care (PI: J Hollingsworth)

22. AHRQ R01 HS024525-03 01/01/2019-09/30/2021 1.20 Calendar

Total Award Amount: \$1,716,932

Assessing the Effects of Accountable Care Organizations Surgical Spending and Quality (PI: J

Hollingsworth)

23. PCORI CE-1304-6543

09/01/2014-02/28/2017

1.20 Calendar

Post-Treatment Surveillance in Breast Cancer: Bringing CER to the Alliance (PI: C Greenberg)

# Co-Investigator (Internal Funding)

24. UW Health

07/01/2015 - 08/31/2017

0.96 Calendar

Accountable Care Organization Reporting Project (PI: M Smith)

25. University of Wisconsin Survey Center

02/20/2015-08/31/2017

1.20 Calendar

Sampling Design and Survey Data Analysis

# Pending Grants Principal Investigator

1. NIH/NIA R01

04/01/2025-03/31/2030

3.60 Calendar

Total Award Amount: \$3,859,495

Bayesian survey weighting and poststratification for health disparity research

2. NIH/NIA R01

12/01/2024-11/30/2028

1.20 Calendar

Total Award Amount: \$1,510,098

Advancing Data Science Techniques in Health Equity Research with a Novel Total Data Quality Paradigm

3. Stavros Niarchos Foundation/Child Mind Institute 01/01/2024-12/31/2026 2.40 Calendar Total Award Amount: \$192,822

Global Center for Child and Adolescent Mental Health at the Child Mind Institute Global Survey Initiative

#### Co-Investigator

4. NIH/NIDA R01

12/01/2024 – 11/30/2029

1.20 Calendar

Characterizing normative and divergent maturation of computational cognitive mechanisms jointly across brain and behavioral data in the ABCD Study

### **Publications**

Peer Reviewed Articles: \* Corresponding author; # Student advised by Si

- 1. B West, **Y** Si\*, Y Hu, S. McCabe, and P Veliz (2024). The Role of Weighting Adjustment for Attrition in Longitudinal Trajectory Modeling: A Simulation Study, Communications in Statistics Simulation and Computation (Forthcoming)
- 2. S Mathur, Y Si\*, and J Reiter (2024), Fully Synthetic Data for Complex Surveys, Survey Methodology (Forthcoming), link
- 3. Y Si\* (2024). On the Use of Auxiliary Variables in Multilevel Regression and Poststratification, Statistical Science (Forthcoming), link

- 4. Y Si\*, R Little, Y Mo, and N Sedransk (2024). Nonresponse Bias Analysis in Longitudinal Studies: A Comparative Review with an Application to the Early Childhood Longitudinal Study, International Statistical Review (available online), doi
- 5. Y Si\*, S Lee, and S Heeringa (2024), Population Weighting in Statistical Analysis, JAMA-Internal Medicine, 184(1), 98-99, doi
- 6. K Li<sup>#</sup>, and **Y Si<sup>\*</sup>** (2024). Embedded Multilevel Regression and Poststratification: Model-based Inference with Incomplete Auxiliary Information, Statistics in Medicine, 43(2), 256–278, doi
- 7. Z Lin<sup>‡</sup>, **Y Si**\*, and J Kang (2024). Latent Subgroup Identification in Image-on-scalar Regression, Annals of Applied Statistics, 18(1), 468–486, doi
- 8. M Demidenko, E Huntley, L Du, C Estor, Y Si, C Wagner, P Clarke, and D Keating (2024). Individual and Community Level Developmental Adversities: Associations with Marijuana & Alcohol Use in a Longitudinal Study of Adolescents, *Journal of Youth and Adolescence*. 53(4), 799–813, doi
- 9. Y Si\*, R Little, Y Mo, and N Sedransk (2023). A Case Study of Nonresponse Bias Analysis in Educational Assessment Surveys, *Journal of Educational and Behavioral Statistics*, 48(3), 271–295, doi
- 10. Y Si\*, S Heeringa, D Johnson, R Little, W Liu, F Pfeffer, and T Raghunathan (2023). Multiple Imputation with Massive Data: An Application to the Panel Study of Income Dynamics, *Journal of Survey Statistics and Methodology*, 11(1), 234–259, doi
- 11. J Schumacher, H Neuman, M Yu, D Vanness, Y Si, E Burnside, K Ruddy, A Partridge, D Schrag, S Edge, Y Zhang, E Jacobs, J Havlena, A Francescatti, D Winchester, D McKellar, P Spears, D Kozower, G Chang, and C Greenberg (2022). Surveillance Imaging vs Symptomatic Recurrence Detection and Survival in Stage II-III Breast Cancer, *Journal of the National Cancer Institute*, doi
- 12. Y Si\*, B West, P Veliz, M Patrick, J Schulenberg, D Kloska, Y Terry-McElrath, and S McCabe (2022). An Empirical Evaluation of Alternative Approaches to Adjusting for Attrition When Analyzing Longitudinal Survey Data on Young Adults' Substance Use Trajectories, *International Journal of Methods in Psychiatric Research*, 31(3), e1916, doi
- 13. Y Si\*, L Covello, S Wang, T Covello, and A Gelman (2022). Beyond Vaccination Rates: A Synthetic Random Proxy Metric of Total SARS-CoV-2 Immunity Seroprevalence in the Community, Epidemiology, 33(4), 457–464, doi
- 14. S Bakre, N Moloci, E Norton, V Lewis, Y Si, S Lin, E Lawton, L Herrel, and J Hollingsworth (2022). Association Between Organizational Quality and Out-of-Network Primary Care Among Accountable Care Organizations That Care for High vs Low Proportions of Patients of Racial and Ethnic Minority Groups, JAMA Health Forum, 3(4):e220575, doi
- 15. Y Si\*, N Moloci, S Murali, S Krein, A Ryan, and J Hollingsworth (2022). Use of Preventive Care Services and Hospitalization among Medicare Beneficiaries in Accountable Care Organizations that Exited the Shared Savings Program, JAMA Health Forum, 3(1):e214452, doi

- 16. K Constante, E Huntley, Y Si, C Wagner, E Schillinger, and D Keating (2021). Conceptualizing Protective Family Context and Its Effect on Substance Use: Comparisons across Diverse Ethnic-Racial Youth, Substance Abuse, 42(4), 796–805, doi
- 17. J Song, B Radler, M Lachman, M Marlick, **Y Si**, and C Ryff (2021). Who Returns? Understanding Varieties of Longitudinal Participation in MIDUS, *Journal of Aging and Health*, 33(10), 896–907, doi
- 18. L Covello, A Gelman, Y Si\*, and S Wang (2021). Routine Hospital-Based SARS-CoV-2 Testing Outperforms State-Based Data in Predicting Clinical Burden, *Epidemiology*, 32(6), 792–799, doi
- 19. **Y** Si\* and P Zhou<sup>‡</sup> (2021). Bayes-raking: Bayesian Finite Population Inference with Known Margins, Journal of Survey Statistics and Methodology, 9(4), 833–855, doi
- R Hsi, P Yan, D Goldfarb, A Egbuji, Y Si, V Shahinian, and J Hollingsworth (2021). Comparison of Selective Versus Empiric Pharmacologic Preventative Therapy with Kidney Stone Recurrence, Urology 149, 81–88, doi
- 21. N Moloci, **Y Si**, E Norton, A Ryan, and J Hollingsworth (2021). Predicting Losses from Medicare Shared Savings Program Departures, *Journal of General Internal Medicine*, 36, 2490–2491, doi
- 22. Y Si\*, M Palta, and M Smith (2020). Bayesian Profiling Multiple Imputation for Missing Hemoglobin Values in Electronic Health Records, Annals of Applied Statistics 14(4), 1903–1924, doi
- 23. Y Si\*, R Trangucci, J Gabry, and A Gelman (2020). Bayesian Hierarchical Weighting Adjustment and Survey Inference, Survey Methodology, 46(2), 181–214, doi
- 24. Y Si\* (2020). Model-based Inferences, In P. Atkinson, S. Delamont, A. Cernat, J.W. Sakshaug, and R.A. Williams (Eds.). SAGE Research Methods Foundations, doi
- 25. J Wang $^{\sharp}$ , Y Jin, and Y Si (2018). Statistical Inference of Non-probability based Web Surveys, Statistics and Decision, 18, 10–14
- 26. S Makela<sup>‡</sup>, **Y Si**<sup>\*</sup>, and A Gelman (2018). Bayesian Inference under Cluster Sampling with Probability Proportional to Size, *Statistics in Medicine*, 37(26), 3849–3868, doi
- 27. J Schumacher, H Neuman, G Chang, B Kozower, E Stephen, Y Meng, D Vanness, Y Si, E Jacobs, A Francescatti, P Spears, J Havlena, T Ades oye, D McKellar, D Winchester, and C Greenberg (2018). A National Study of the Use of Asymptomatic Systemic Imaging for Surveillance Following Breast Cancer Treatment, Annals of Surgical Oncology, 25(9), 2587–2595, doi
- 28. E DuGoff, J Cho, Y Si, and C Pollack (2018). Geographic Variations in Physician Relationships Over Time: Implications for Care Coordination, *Medical Care Research & Review*, 75(5) 586–611, doi
- 29. J Schumacher, H Neuman, Y Zhang, Y Meng, D Vanness, Y Si, E Burnside, K Ruddy, A Partridge, D Schrag, S Edge, E Jacobs, J Havlena, A Francescatti, D Winchester, D McKellar, P Spears, B Kozower, G Chang, and C Greenberg (2017). Asymptomatic Distant Recurrence Detection

- and Survival in Early Stage Breast Cancer: A Nationally Representative Study, *Journal of Clinical Oncology*, 35 (15) 6520–6520, doi
- 30. H Neuman, J Schumacher, A Francescatti, T Adesoye, S Edge, E Burnside, D Vanness, M Yu, Y Si, D McKellar, D Winchester, and C Greenberg (2016). Utility of Clinical Breast Exams in Detecting Local-Regional Recurrence After Breast-Conservation in Women with a Personal History of High-risk Breast Cancer, Annals of Surgical Oncology, 23(10), 3385–3391, doi
- 31. Y Si\*, J Reiter, and S Hillygus (2016). Bayesian Latent Pattern Mixture Models in Panel Studies with Refreshment Samples, *The Annals of Applied Statistics*, 10(1), 118–143, doi
- 32. D Early, J Berg, S Alicea, Y Si, J Aber, R Ryan, and E Deci (2016). The Impact of Every Classroom, Every Day on Student Achievement: Results from a School-randomized Efficacy Trial, Journal of Research on Educational Effectiveness, 9(1), 3–29, doi
- 33. Y  $Si^*$ , N Pillai, and A Gelman (2015). Bayesian Nonparametric Weighted Sampling Inference, Bayesian Analysis, 10(3), 605-625, doi
- 34. Y Si\*, J Reiter, and S Hillygus (2015). Semi-parametric Selection Models for Potentially Non-ignorable Attrition in Panel Studies with Refreshment Samples, *Political Analysis*, 23, 92–112, doi
- 35. S Makela<sup>‡</sup>, **Y Si**, and A Gelman (2014). Statistical Graphics for Survey Weights, *Journal of Revista Columbiana De Estadistica*, 37, 285–295, doi
- 36. Y Si and J Reiter (2013). Nonparametric Bayesian Multiple Imputation for Incomplete Categorical Variables in Large-scale Assessment Surveys, *Journal of Educational and Behavioral Statistics*, 38, 499–521, doi
- 37. Y Deng, S Hillygus, J Reiter, **Y Si**, and S Zheng (2013). Handling Attrition in Longitudinal Studies: The Case for Refreshment Samples, *Statistical Science*, 22, 238–256, doi
- 38. Y Si and J Reiter (2011). A Comparison of Posterior Simulation and Inference by Combining Rules for Multiple Imputation, *Journal of Statistical Theory and Practice*, 5(2), 335–347, doi

#### Expert Panel Publications

39. T Smeeding, D Johnson, C Citro, K Abraham, W Darity, K Dynan, J Faber, R Hall, S Jenkins, D Jones, A O'Hara, L Pistaferri, J Sabelhaus, Y Si, A Sufi, G Zucman, and J Zwijnenburg (2024), Creating An Integrated System of Data and Statistics on Household Income, Consumption, and Wealth: Time to Build, A Consensus Study Report of the National Academies of Sciences, Engineering, and Medicine's Committee on National Statistics, link

#### **Books**

40. A Gelman, L Kennedy, R Alexander and Y Si (2024), CRC Textbook on Multilevel Regression and Poststratification (in progress)

# Book Chapters

- 41. Y Si (2022). Theories of MRP, in CRC Textbook on Multilevel Regression and Poststratification, edited by A Gelman, L Kennedy, R Alexander and Y Si (revision submitted)
- 42. S Makela<sup>‡</sup>, **Y Si**, and A Gelman (2018). Graphical Visualization of Polling Results, in Oxford Handbook on Polling and Polling Methods, edited by Lonna Atkeson and Michael Alvarez, doi

## Other Publications (Technical Reports, Conference Proceedings, and Media Articles)

- 43. M Patrick, Y Terry-McElrath, P Berglund, Y Pang, S Heeringa, and Y Si (2022), An Updated Weighting Strategy for the Monitoring the Future Panel Study, *Institute for Social Research*, *University of Michigan*, link
- 44. Y Si, R Little, and Y Mo (2021). Nonresponse Bias Analysis in Longitudinal Studies: A Case Study with the ECLS-K 2011 Study, National Institute of Statistical Sciences and National Center for Education Statistics
- 45. Y Si (2021). Statistical Adjustments of Sample Representation in Community-Level Prevalence Estimates of COVID-19 Transmission and Immunity, contribution to a special article, Surveys, Dashboards, and Innovations in Response to COVID-19, by D Liao, AMSTAT News, link
- 46. Y Si, R Little, and Y Mo (2021). Nonresponse Bias Analysis in Cross-sectional Studies: A Case Study with the ECLS-K 2011 Study, National Institute of Statistical Sciences and National Center for Education Statistics
- 47. L Covello, A Gelman, and Y Si (2021). We Still Don't Know How Many People Are Infected with Covid. We Can Find Out, *The Washington Post*, link
- 48. V Thaker, S Deng, C Zhou, B West, **Y Si**, and I Fennoy (2021). Population-level changes in Homeostatic Model Assessment for Insulin Resistance (HOMA-IR) in US youth aged 12-18 years, 1999-2018, *J Endocr Soc. 2021 May 3;5(Suppl 1):A451*, doi
- 49. L Kennedy, G Basse, A Gelman, G Imbens, Y Si, D Rothenhausler, and J Spiess (2020). Lessons Learned and Remaining Challenges for Online Seminars and Conferences, *Amstat News*, link
- 50. **Y Si** and A Gelman (2014). Survey Weighting for the New York City Longitudinal Survey on Poverty Measure, New York City Longitudinal Study of Poverty
- 51. Y Si and A Gelman (2014). Methodology for Constructing Primary Caregiver Weights for Wave 3-5 in the Fragile Families and Child Wellbeing Study, Fragile Families and Child Wellbeing Study, link

- 52. Y Si and A Gelman (2014). Methodology for Constructing Mother, Father and Couple Weights for Core Telephone Survey Wave 5, Fragile Families and Child Wellbeing Study, link
- 53. **Y Si** and A Gelman (2014). Methodology for Constructing Child Weights for Wave 3-5 in the Fragile Families and Child Wellbeing Study, Fragile Families and Child Wellbeing Study, link
- 54. C Wimer, I Garfinkel, M Gelblum, N Lasala, Y Si, J Teitler, and J Waldfogel (2013). The New York City Poverty and Disadvantage Tracker, *Robin Hood Foundation*, link
- 55. E Deci, D Early, J Aber, R Ryan, J Berg, S Alicea, and Y Si (2013). Report: Validation of the Engagement, Alignment, and Rigor (EAR) Classroom Visit Protocol & Every Classroom, Every Day Efficacy Trial, U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, link
- 56. Y Si and J Reiter (2010). A New Approach to Protecting Confidentiality for Census Microdata with Missing Values, In JSM Proceedings, Survey Research Methods Section. Alexandria, VA: American Statistical Association, link

#### Journal Submissions Under Peer Review

- 57. Y Si\*, T Tran, J Gabry, M Morris, and A Gelman (2024), Multilevel Regression and Poststratification Interface: Application to Track Community-level COVID-19 Viral Transmission, Population Health Metrics, link
- 58. M Paulus, K Forthman, R Kuplicki, W Thompson, C Nemeroff, Y Si, and C Fan (2024), Treatment Resistant Depression: Socio-demographic Characteristics, Comorbidity and Treatment Patterns from the All of Us Research Program, American Journal of Psychiatry
- 59. Y Si\*, G Bandoli, K Cole, D Fallin, E Stuart, K Gurka, K Althoff, and W Thompson (2024), Advancing High Quality Longitudinal Data Collection: Implications for the HEALthy Brain and Child Development (HBCD) Study Design and Recruitment, Developmental Cognitive Neuroscience
- 60. S Williams, Y Liu, Y Si, S Galea, and Q Chen (2023). Improving Survey Inference Using Administrative Records without Releasing Individual-level Continuous Data, Statistics in Medicine

# Software Development

- Y Si, T Tran, J Gabry, M Morris, and A Gelman (2024), MRP interface, link
- A Gelman, J Hill, Y Su, M Yajima, M Pittau, B Goodrich, Y Si, and J Kropko (2015). R package "mi" for missing data imputation, link

#### Presentations

# Invited short course/webinar

- 1. A Comparative Review of Data Integration Methods, Webinar, Survey Methods and Research Section, American Statistical Association, Apr. 2024, link
- 2. Introduction to Bayesian Inference, Bootcamp for the Schmidt AI in Science Postdocs, Michigan Institute for Data Science (MIDAS), University of Michigan, MI, Feb. 2023

- 3. Applying Weights to Longitudinal Survey Data, First workshop for the Network for Innovative Methods in Longitudinal Aging Studies, Ann Arbor, MI, Sept. 2022, link
- 4. Multilevel Regression and Poststratification, Webinar, Survey Methods and Research Section, American Statistical Association, Oct. 2019, link

# Invited seminar/conference talk

- 5. Social, Behavioral, and Economic COVID Consortium Annual Meeting, May. 2024
- 6. Primary Research Staff (PRS) Seminar, Survey Research Center, University of Michigan, MI, Apr. 2024
- 7. Working group in Small Area Estimation, University of Washington, WA, Apr. 2024
- 8. ENAR meeting, Baltimore, MD, Mar. 2024
- The Panel Study of Income Dynamics Seminar Series, University of Michigan, Ann Arbor, MI, Nov. 2023
- 10. Department of Preventive Medicine, Northwestern University, Chicago, IL, Nov. 2023
- 11. Federal Committee on Statistical Methodology (FCSM) Research & Policy Conference, College Park, MD, Oct. 2023
- 12. PhD Seminar, Michigan Program in Survey and Data Science and Joint Program in Survey Methodology (MPSDS/JPSM), University of Michigan, MI, Sept. 2023
- 13. Social, Behavioral, and Economic COVID Consortium Annual Meeting, Sept. 2023
- 14. The 6th Baltic-Nordic Conference on Survey Statistics, Helsinki, Finland, Aug. 2023
- 15. Joint Statistical Meetings (JSM), Toronto, Canada, Aug. 2023
- 16. International Statistical Institute (ISI) World Statistics Congress, Ottawa, Canada, Jul. 2023
- 17. ICSA International Conference, Chengdu, China, Jul. 2023
- 18. The ICSA Applied Statistics Symposium, Ann Arbor, MI, Jun. 2023
- 19. Department of Biostatistics, University of Michigan, MI, Mar. 2023
- 20. MPSDS/JPSM Seminar Series (online), University of Michigan, MI, Feb. 2023
- 21. Department of Statistics, University of Missouri, Columbia, MO, Dec. 2022
- 22. Department of Statistics, University of California, Santa Cruz, CA, Nov. 2022
- 23. PhD Seminar, MPSDS/JPSM, University of Michigan, MI, Nov. 2022
- 24. Social, Behavioral, and Economic COVID Consortium Annual Meeting, Sept. 2022
- 25. Joint Statistical Meetings (JSM), DC, Aug. 2022
- 26. The International Conference on Econometrics and Statistics (EcoSta 2022, online), Jun. 2022
- 27. The Statistical Society of Canada 2022 Meeting (online), Jun. 2022

- 28. The Conference on Small Area Estimation, College Park, MD, May. 2022
- 29. Forum on Coordinated Sample Design for Multiple Surveys (online), May. 2022
- 30. Multilevel Regression and Poststratification Working Group (online), Oct. 2021
- 31. PhD Seminar, Michigan Program in Survey and Data Science and Joint Program in Survey Methodology (MPSDS/JPSM), University of Michigan, MI, Sept. 2021
- 32. The International Chinese Statistical Association (ICSA) Applied Statistics Symposium (online), Sept. 2021
- 33. Joint Statistical Meetings (online), Aug. 2021
- 34. The Statistical Society of Canada 2021 Meeting (online), Jun. 2021
- 35. The International Indian Statistical Association Conference (online) May. 2021
- 36. Michigan Center on the Demography of Aging (MiCDA) Symposium (online), University of Michigan, MI, May. 2021
- 37. Primary Research Staff (PRS) Seminar (online), Survey Research Center, University of Michigan, MI, Jan. 2021
- 38. Department of Preventive Medicine (online), Northwestern University, Chicago, IL, Jan. 2021
- 39. The ICSA Applied Statistics Symposium (online), Houston, TX, Dec 2020
- 40. PhD Seminar (online), Program in Survey Methodology, University of Michigan, MI, Nov. 2020
- 41. Joint Statistical Meetings (online), Aug. 2020
- 42. MiCDA Symposium (online), University of Michigan, MI, May. 2020
- 43. Michigan Institute for Data Science (MIDAS), Working Group for Selection Bias and Missing Data in COVID-19 Population Studies (online), University of Michigan, MI, Apr. 2020
- 44. Michigan Program in Survey Methodology/Joint Program in Survey Methodology (MPSM/JPSM) Seminar Series (online), University of Michigan, MI, Apr. 2020
- 45. Conference on Multilevel Regression and Poststratification (online), New York, NY, Apr. 2020
- 46. Data Anonymization in the 21st century, Data Privacy Day, The the Inter-university Consortium for Political and Social Research (ICPSR) Council meeting, Ann Arbor, MI, Mar. 2020
- 47. The Dialogue between Big Data and Survey Data in Social Science Research, Peking University, Beijing, China, Sept. 2019
- 48. School of Statistics, Renmin University of China, Beijing, China, Sept. 2019
- 49. Conference on Current Trends in Survey Statistics-A Satellite Conference to the 62nd ISI World Statistics Congress, National University of Singapore, Singapore, Aug. 2019
- Junior Fellows Seminar, Joint Program in Survey Methodology, University of Maryland, MD,
   Jul. 2019
- 51. The ICSA Applied Statistics Symposium, Raleigh, NC, Jun. 2019

- 52. Bayesian Causal Inference Workshop, Columbus, OH, Jun. 2019
- 53. Department of Biostatistics, University of Michigan, MI, Oct. 2018
- Junior Fellows Seminar, Joint Program in Survey Methodology, University of Maryland, MD,
   Jul. 2018
- 55. International Society for Bayesian Analysis (ISBA) 2018 Meetings, Edinburgh, UK, Jun. 2018
- 56. MPSM/JPSM Seminar Series, University of Michigan, MI, Jan. 2018
- 57. Department of Urology, University of Michigan, MI, Jan. 2018
- 58. Center for Youth & Social Issues, University of Michigan, MI, Jan. 2018
- 59. Joint Statistical Meetings, Baltimore, MD, Aug. 2017
- 60. 2016 Conference for Women in Statistics and Data Science, NC, Oct. 2016
- 61. Survey Research Center, Institute of Social Research, University of Michigan, MI, Sept. 2016
- 62. Department of Statistics, University of Missouri, MO, Mar. 2016
- 63. ENAR meeting, Austin, TX, Mar. 2016
- 64. The 8th International Conference of the ERCIM WG on Computational and Methodological Statistics, London, UK, Dec. 2015
- 65. Division of Biostatistics, Medical College of Wisconsin, WI, Oct. 2015
- 66. Joint Statistical Meetings, Seattle, WA, Aug. 2015
- 67. ISBS-DIA Joint Symposium on Biopharmaceutical Statistics, BJ, China, Jun. 2015
- 68. School of Statistics, Renmin University of China, BJ, China, Jun. 2015
- 69. Department of Statistics, University of Connecticut, CT, Apr. 2015
- 70. Department of Statistics, University of Wisconsin-Madison, WI, Mar. 2015
- 71. Department of Biostatistics and Epidemiology, University of Illinois at Chicago, IL, Oct. 2014
- 72. Department of Psychology, University of Notre Dame, IN, Sept. 2014
- Computational Methods for Survey and Census Data in Social Sciences, Montreal, CA, Jun. 2014
- 74. Department of Statistics, Iowa State University, IW, Mar. 2014
- 75. Department of Mathematics and Statistics, American University, DC, Jan. 2014
- 76. Department of Population Health Sciences, University of Wisconsin-Madison, WI, Jan. 2014
- 77. The American Panel Study Workshop, Washington University at St. Louis, MO, Nov. 2013
- 78. Department of Mathematical Sciences, New Jersey Institute of Technology, NJ, Oct. 2013
- 79. Department of Epidemiology, Columbia University, NY, Apr. 2013
- 80. Department of Statistics, Columbia University, NY, Sept. 2012
- 81. Statistical Society of Canada 2012 Meeting, Guelph, ON, Canada Jun. 2012

- 82. American Institute for Research, DC, Apr. 2012
- 83. The Wharton School of Business, University of Pennsylvania, Philly, PA, Feb. 2012
- 84. Merck Co, Philly, PA, Feb. 2012
- 85. Joint Statistical Meetings, Vancouver, BC, Canada, Aug. 2010

#### Contributed

- 86. Biostatistics Department 70th Anniversary Conference, University of Michigan, May. 2022
- 87. MIDAS Annual Data Science Symposium (online), University of Michigan, Nov. 2020
- 88. OpenDP Community Meeting (online), May. 2020
- 89. Value-based Purchasing Accountable Care Organizations (ACO) Working Group Presentation, University of Michigan, Oct. 2019
- 90. Joint Statistical Meetings, Denver, CO, Jul. 2019
- 91. Value-based Purchasing ACO Working Group Presentation, University of Michigan, Mar. 2019
- 92. Quantitative Methodology Program/Survey Methodology Program (QMP/SMP) Methodological Seminar, University of Michigan, Feb. 2019
- 93. Advances in Causal Inference, Survey Statistics, Disclosure Risk, and Missing Data, in Honor of Rod Little's 65th Birthday, Ann Arbor, MI, Oct. 2015
- 94. IMS Junior Researcher Conference, Seattle, WA, Aug. 2015
- 95. ENAR Spring Meeting, Miami, FL, Mar. 2015
- 96. Frontiers of Hierarchical Modeling in Observational Studies, Complex Surveys and Big Data, College Park, MD, May. 2014
- 97. OBayes Workshop and Bayes 250, Durham, NC, Dec. 2013
- 98. SAMSI Workshop on Computational Methods in Social Sciences, RTP, NC, Aug. 2013
- 99. Joint Statistical Meetings, Montreal, CA, Aug. 2013
- 100. The 25th Anniversary Celebration for Department of Statistical Science, Duke University, Durham, NC, Oct. 2012
- 101. Joint Statistical Meetings, San Diego, CA, Aug. 2012
- 102. Joint Statistical Meetings, Miami, FL, Aug. 2011
- 103. The 2011 International Workshop on Objective Bayes Methodology, Shanghai, China, Jun. 2011

Teaching	University of Michigan Department of Statistics	Instructor
Experience	STATS 451 Bayesian Data Analysis	70 . 1
	Winter 2022	72 students
	University of Michigan MPSDS and University of Maryland JPSM	I Instructor
	SURVMETH 687 Applications of Statistical Modeling	
	Fall 2022	27 students
	Fall 2021	17 students
	Fall 2020	25 students
	Fall 2019	29 students
	Fall 2018	21 students, Co-Instr
	SURVMETH 625 Applied Sampling	
	Winter 2023	33 students
	Winter 2021	19 students, Co-Instr
	Winter 2020	21 students, Co-Instr
	Winter 2019	24 students, Co-Instr
	Winter 2018	15 students, Co-Instr
	SURVMETH 614 Analysis Methods for Complex Sample Survey Data	
	Summer 2022	7 students, Co-Instr
	Summer 2020	34 students, Co-Instr
	Summer 2019	11 students
	Summer 2018	15 students, Co-Instr
	SURVMETH 699: Directed Research	
	Winter 2024	1 student
	Fall 2023	2 students
	Winter 2023	1 student
	Fall 2020	1 student
	University of Wisconsin-Madison	Instructor
	BMI/PHS 651 Advanced Regression Methods	Fall 2015, 2016
	PHS 805 Epidemiologic Methods (Guest)	Fall 2015, 2016
	STAT 992 Research Topics in Predictive Modeling for Clinical Biostatistics	Fall 2015
	SIBS 546 Biostat Practicum	$Summer\ 2015$
	BMI/PHS 652 Missing Data: Topics and Tools	Spring 2015
	BMI/PHS 651 Advanced Regression Methods (Guest)	Fall 2014
	BMI/PHS 551 Introduction to Biostatistics (Guest)	Fall 2014
	Harvard University	Guest Lecturer

Missing Data Methods

Spring 2014

#### Columbia University

Guest Lecturer

Sample Surveys Fall 2013

Duke University Teaching Assistant

Bayesian Statistics and Modern Computing

Fall 2010

Generalized Linear Models

Fall 2010

Spring 2011

Probability/Statistical Models

Data Analysis and Statistical Inference

Fall 2009

#### Supervising and • Mentees:

advising

Alberto Arletti, MS, Visiting PhD Scholar, University of Michigan, 2024

Toan Tran, MS, Research Software Engineer, University of Michigan, 2023-

Jeremy Seeman, PhD, Data Science Postdoctoral Fellow, University of Michigan, 2023-2024

# • Research Assistants:

Aulia Dini Rafsanjani, MS, Michigan Program in Survey and Data Science, University of Michigan, 2023

(Winner, 2023 Rackham Conference Travel Grant)

Wenxin Guo, BS, Department of Statistics, University of Michigan, 2022-2023

Yueying Hu, BS, Department of Statistics, University of Michigan, 2022-2023

Licheng Du, BS, Department of Statistics, University of Michigan, 2022

Heyuan Liu, BS, Department of Statistics, University of Michigan, 2022

Wenxing Wang, BS, Department of Statistics, University of Michigan, 2022

Chen Liu, MS, Department of Statistics, University of Michigan, 2021-2023

Zikai Lin, Department of Biostatistics, University of Michigan, MS, 2019-2021, PhD, 2021-

(Winner, 2023 ICSA Applied Statistics Symposium Student Poster Award;

ENAR 2022 Spring Meeting Distinguished Student Paper Award;

2022 Rackham Conference Travel Grant)

Katherine Li, Department of Biostatistics, University of Michigan, MS, 2018-2020, PhD, 2020-

(Winner, 2022 Rackham Conference Travel Grant;

2021 Rackham Conference Travel Grant;

2019 Michigan Institute for Data Science Symposium Student Poster Award)

Jiazhi Yang, MS, Michigan Program in Survey and Data Science, University of Michigan, 2021-2022

(Winner, 2022 Rackham Conference Travel Grant)

Adam Kaderabek, MS, Michigan Program in Survey and Data Science, University of Michigan, 2021-2022

(Winner, 2021 Rackham Conference Travel Grant)

Li-Hsuan Lin, BS, Department of Statistics, University of Michigan, 2020-2021

Ang Li, MS, Michigan Program in Survey Methodology, University of Michigan, 2018

Yijun Li, MS, Department of Biostatistics, University of Michigan, 2018

Zeping Tao, MS, Michigan Program in Survey Methodology, University of Michigan, 2018 Micha Fischer, PhD, Michigan Program in Survey Methodology, University of Michigan, 2017-2018

Peigen Zhou, PhD, Department of Statistics, University of Wisconsin-Madison, 2015-2017 Sijing Li, PhD, Department of Statistics, University of Wisconsin-Madison, 2015-2017 Duzhe Wang, PhD, Department of Statistics, University of Wisconsin-Madison, 2017 Yifei Zhang, MS, Department of Biostatistics & Medical Informatics, University of Wisconsin-Madison, 2017

Jun Wang, PhD, School of Statistics, Renmin University of China, 2017

#### • Academic Advising:

Akari Oya, MS, Michigan Program in Survey and Data Science, University of Michigan, 2023-(Winner, 2024 Rackham Conference Travel Grant)

Yao Lu, MS, Michigan Program in Survey and Data Science, University of Michigan, 2023–Keqing Lu, MS, Michigan Program in Survey and Data Science, University of Michigan, 2023–Zeyu Lou, MS, Michigan Program in Survey and Data Science, University of Michigan, 2023–Xinyi Chen, MS, Michigan Program in Survey and Data Science, University of Michigan, 2023–Wen Chen, MS, Michigan Program in Survey and Data Science, University of Michigan, 2023–Aulia Dini Rafsanjani, MS, Michigan Program in Survey and Data Science, University of Michigan, 2022–2024

Junhui Qian, MS, Michigan Program in Survey Methodology, University of Michigan, 2021-2023
Anqi Liu, MS, Michigan Program in Survey Methodology, University of Michigan, 2021-2023
Jiazhi Yang, MS, Michigan Program in Survey Methodology, University of Michigan, 2021-2023
Chendi Zhao, MS, Michigan Program in Survey Methodology, University of Michigan, 2020-2022
Hanh Bui, MS, Michigan Program in Survey Methodology, University of Michigan, 2018-2024
Shiyu Zhang, PhD, Michigan Program in Survey Methodology, University of Michigan, 2018-2021
Junhan Tang, MS, Michigan Program in Survey Methodology, University of Michigan, 2019-2021
Ilse Paniagua, MS, Michigan Program in Survey Methodology, University of Michigan, 2018-2020
Ruixuan Li, MS, Michigan Program in Survey Methodology, University of Michigan, 2018-2020
Crystal Chen, MS, Department of Statistics, University of Wisconsin-Madison, 2015-2016
Lan Luo, MS, Department of Statistics, University of Wisconsin-Madison, 2015-2016

# • PhD Dissertation Committee:

Zikai Lin, PhD, Department of Biostatistics, University of Michigan, Co-chair, 2024 (expected) Katherine Li, PhD, Department of Biostatistics, University of Michigan, Co-chair, 2024 (expected)

Vincenzo Loffredo, PhD, Department of Statistics, University of Michigan, 2024 Rob Trangucci, PhD, Department of Statistics, University of Michigan, 2023 Joe Levy, PhD, Department of Population Health Sciences, University of Wisconsin-Madison, 2017

Jared Huling, PhD, Department of Statistics, University of Wisconsin-Madison, 2017
Sien Deng, PhD, Department of Educational Psychology, University of Wisconsin-Madison, 2017
Cuicui Qi, PhD, Department of Statistics, University of Wisconsin-Madison, 2016
Donggyu Kim, PhD, Department of Statistics, University of Wisconsin-Madison, 2016
Tram Ta, PhD, Department of Statistics, University of Wisconsin-Madison, 2016
Chenliang Xu, PhD, Department of Statistics, University of Wisconsin-Madison, 2015

• PhD Preliminary/Comprehensive Exam Committee:

Kaidar Nurumov, PhD, Michigan Program in Survey and Data Science, University of Michigan, 2024

Vincenzo Loffredo, PhD, Department of Statistics, University of Michigan, 2022 Ali Rafei, PhD, Michigan Program in Survey Methodology, University of Michigan, Chair, 2019 Fernanda Alvarado-Leiton, PhD, Michigan Program in Survey Methodology, University of Michigan, 2019

Yifei Liu, PhD, Department of Statistics, University of Wisconsin-Madison, 2017
Dan Su, PhD, Department of Educational Psychology, University of Wisconsin-Madison, 2017
Joe Levy, PhD, Department of Population Health Sciences, University of Wisconsin-Madison, 2016

Sien Deng, PhD, Department of Educational Psychology, University of Wisconsin-Madison, 2016 Tram Ta, PhD, Department of Statistics, University of Wisconsin-Madison, 2015 Chenliang Xu, PhD, Department of Statistics, University of Wisconsin-Madison, 2014

# Professional Activities

#### National Committee Memberships

- Discussion panelist in the HEAL/NIDA Workshop on substance use disorder recovery within the socioenvironmental context, 2024, link
- Protocol review board member of CTN-0146 Adolescent Post-operative opioid EXposure (APEX) for the Clinical Trials Network in the National Institute on Drug Abuse, 2024-
- Expert Gathering of the Stavros Niarchos Foundation (SNF) Global Center for Child and Adolescent Mental Health at the Child Mind Institute, New York, 2023
- Technical Assistance Partner, Data Equity Center, University of California, Los Angeles, 2023-
- Co-chair for HBCD Biostatistics working group, 2022-
- Panel member on An Integrated System of Household Income, Wealth, and Consumption Data and Statistics to Inform Policy and Research, Committee on National Statistics (CNSTAT), National Academies of Sciences, Engineering, and Medicine, link, 2022-2024
- Grant reviewer for NSF-Research on the Science & Technology Enterprise: Indicators, Statistics, and Methods, 2022
- Technical working group member for the USDA-NASS IDEAL project, USDA, Washington, DC, 2021-
- ENAR student paper award committee, 2021-

- Conference organizer on Multilevel Regression and Poststratification, Columbia University, 2020
- Reviewer for Student Paper Competition, the International Conference on Health Policy Statistics (ICHPS), 2019
- Grant reviewer for NSF-Methodology, Measurement, and Statistics program, 2016, 2020, 2024
- Reviewer for the International Conference on Machine Learning, 2016
- Reviewer for the International Conference on Artificial Intelligence and Statistics, 2016
- Reviewer for Student Paper Competition, JSM, 2015
- Judge for Poster Award Competition, ICSA, 2023

# Local Committee Memberships

- Admission rubrics review committee, MPSDS/JPSM, University of Michigan/University of Maryland, 2024-
- Promotion review committee, Survey Research Center, University of Michigan, 2024-
- Reviewer for Schmidt AI in Science Fellowship Application, MIDAS, University of Michigan, 2023
- Reviewer for Michigan Data Science Fellowship Application, MIDAS, University of Michigan, 2023
- Grant reviewer for Graham Sustainability Institute Catalyst Grants, University of Michigan, 2023
- Faculty DEI working group member, Institute for Social Research, University of Michigan, 2023-
- Seminar organization chair, Survey Research Center, University of Michigan, 2023-
- Sampling Program for Survey Statisticians admission committee and Kish Fellowship award committee, 2023-
- ICPSR Disclosure Review Board, 2022-
- Grant reviewer for Propelling Original Data Science Grants, MIDAS, University of Michigan, 2021
- JPSM MS online degree program committee, 2021-2022
- Working group leader for the Methodology and Tool Development for Selection Bias and Missing Data in Covid-19 Population Studies, MIDAS, University of Michigan, 2020
- Faculty judge for Michigan Student Symposium for Interdisciplinary Statistical Sciences, 2020
- Master student admission, MPSDS/JPSM, University of Michigan/University of Maryland, 2019-
- Seminar organization, Survey Research Center, University of Michigan, 2018-2020
- PhD qualification exam committee chair, MPSDS/JPSM, University of Michigan/University of Maryland, 2018-
- Grant reviewer for Office of Research Faculty Grants and Awards, University of Michigan, 2017
- PhD student admission, MPSDS/JPSM, University of Michigan/University of Maryland, 2017-2019
- Vice president for the American Statistical Association (ASA) Wisconsin Chapter, 2016
- Wisconsin ASA Chapter Madison Networking and Planning Luncheon, 2016

- The 7th International Forum on Statistics of Renmin University of China, 2016
- Department seminar, Biostatistics & Medical Informatics, University of Wisconsin, 2015-2017

#### Other National and Local Service

- Invited session organizer for:
  - "Recent Advances in Incorporating Sample Design Effects and Spatial Structure into Small Area Estimation," The ISBA World Meeting, 2024
  - "Model and Variable Selection Methods with Complex Survey Data," The ICSA Applied Statistics Symposium, 2023
  - "Bayesian estimation of multilevel modeling with survey data," JSM, 2023
  - "COVID-19 and survey sampling: Challenges and opportunities," JSM, 2021
  - "Evolving survey inference in the big data era: Challenges and opportunities," JSM, 2019
  - "Recent development of Bayesian methods in survey sampling," JSM, 2017
  - "Recent development in statistical analysis of missing data in observational studies," IMS-China, 2017
  - "Missing data issues in meta-analysis with individual participant data," ENAR meeting, 2016
- Roundtable discussion organizer for "Bridging data science and survey methodology in research and educational programs," JSM, 2020
- Session chair for ENAR annual meetings, 2015, 2016, 2017, 2024
- Session chair for JSM, 2011, 2013, 2015, 2019, 2020, 2023, 2024
- Session chair for ICSA Applied Statistics Symposium, 2021, 2023

### Editorial Service

#### • Guest Editor:

Journal of the Royal Statistical Society-Series A, Special Issue "Frontiers in Data Integration," 2023-

Mathematics, Special Issue "Survey Statistics and Survey Sampling: Opportunity and Challenge," 2022-

#### • Associate Editor:

STAT, 2023-

Journal of Official Statistics, 2019-

#### • Editorial Board Member:

Journal of Educational and Behavioral Statistics, 2023-

#### • Referee for Journals:

Journal of the American Statistical Association, Biometrika, Annals of Applied Statistics, Biometrics, Bayesian Analysis, Journal of the Royal Statistical Society-Series A, Journal of the Royal

Statistical Society-Series B, Journal of Survey Statistics and Methodology, International Statistical Review, Journal of Computational and Graphical Statistics, Survey Methodology, American Journal of Epidemiology, American Journal of Public Health, Austrian Journal of Statistics, Biometrical Journal, Behavior Research Methods, British Journal of Mathematics & Computer Science, Communications in Statistics - Theory and Methods, Developmental Cognitive Neuroscience, Epidemiology, Epidemiologic Methods, European Journal of Operational Research, Harvard Data Science Review, Health Services and Outcome Research Methodology, International Journal of Pattern Recognition and Artificial Intelligence, IERI Monograph Series, JAMA Oncology, Journal of Applied Statistics, Journal of Educational and Behavioral Statistics, Journal of Machine Learning Research, Journal of Official Statistics, Journal of Probability and Statistics, Journal of Statistical Software, Journal of Computational and Applied Mathematics, Communications in Statistics-Theory and Methods, Multivariate Behavioral Research, Methodology, Nature Communications, Population Health Metrics, Population Research and Policy Review, Psychological Methods, Public Health Reports, STAT, Statistical Analysis and Data Mining, Statistical methods in Medical Research, Statistica Sinica, The American Statistician, The Lancet Infectious Diseases, Statistics in Medicine, Scandinavian Journal of Statistics Sankhya A, Statistics and Probability Letters, Statistics and Computing, Electronic Journal of Statistics, Sociological Methods and Research, Spatial Statistics, WIREs Computational Statistics

• Reviewer for books

CRC Textbook on Multilevel Regression and Poststratification

#### Certificates

- Genetics for Social Scientists Workshop, 2020
- University of Michigan American Accent Program, 2019
- Blend@UW Course Design Program, 2015
- Wisconsin Idea Seminar, 2015

#### Membership

- International Biometric Society-ENAR (2014-)
- International Society for Bayesian Analysis (2011-)
- Institute of Mathematical Statistics (2011-)
- International Chinese Statistical Association (2011-)
- American Statistical Association (2010-)