

YAJUAN SI

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| Information | 426 Thompson St Ann Arbor, MI 48104 | <i>E-mail:</i> yajuan@umich.edu <i>Website:</i> http://www-personal.umich.edu/~yajuan |
| Education | Duke University, Department of Statistical Science , Durham, North Carolina, USA Ph.D. , Statistical Science, <i>2012</i> ; M.S. , Statistical Science <i>2011</i> <i>Advisor:</i> Jerome P. Reiter <i>Thesis:</i> Nonparametric Bayesian Methods for Multiple Imputation of Large Scale Incomplete Categorical Data in Panel Studies Renmin University of China, School of Statistics , Beijing, P.R.China B.S., Statistics & Actuarial Science, <i>2008</i> The University of Hong Kong, Department of Statistics & Actuarial Science , Hong Kong Exchange Student, Statistics & Actuarial Science, <i>2007</i> | |
| Professional Experience | University of Michigan , Ann Arbor, MI Research Associate Professor (with tenure) <i>Sept 2022 -</i> Survey Methodology Program, Survey Research Center, Institute for Social Research & Department of Biostatistics, School of Public Health Research Assistant Professor <i>Sept 2017 - Aug 2022</i> Member, Institute for Healthcare Policy & Innovation <i>Jan 2018 -</i> Affiliate, Population Dynamics and Health Program <i>May 2019 -</i> Faculty Associate, Population Studies Center <i>May 2019 -</i> Affiliate, Michigan Center on the Demography of Aging <i>May 2019 -</i> Affiliate, Michigan Institute for Data Science <i>Nov 2019 -</i> University of Maryland , College Park, MD Teaching faculty, Joint Program in Survey Methodology <i>Sept 2019 -</i> National Institute of Statistical Sciences Research Fellow <i>Feb 2020 -</i> University of Wisconsin-Madison , Madison, WI Visiting Assistant Professor, Department of Population Health Sciences <i>Sept 2017 - Sept 2022</i> Assistant Professor (tenure track), Department of Biostatistics & Medical Informatics and Department of Population Health Sciences <i>Aug 2014 - Aug 2017</i> Affiliate, University of Wisconsin Survey Center <i>Feb 2015 - Aug 2017</i> Affiliate, Center for Demography and Ecology <i>Oct 2015 - Aug 2017</i> Affiliate, Department of Statistics <i>Nov 2015 - Aug 2017</i> | |

Columbia University, New York, NYPostdoctoral Research Scholar (*Supervisor*: Andrew Gelman)*Aug 2012 - Jul 2014***Educational Testing Service**, Princeton, NJSummer 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**

- Elected member of the International Statistical Institute (ISI), 2024
- Discussion panelist in the HEAL/National Institute on Drug Abuse 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
- 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
- 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)**

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| 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/NICHHD 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 01/01/2020–06/30/2025 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 Linkage

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| 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)

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| 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. Russell Sage Foundation 01/01/2025–12/31/2026 0.84 Calendar
Total Award Amount: \$88,000

The Normalization of Anti-Diversity and Racist Thinking After Affirmative Action
UM Subcontract PI (PI: D Pabello at University of California, Los Angeles)

2. 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

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. Arnold Ventures, LLC 01/01/2025–12/31/2029 0.50 Calendar in Yrs1-2
Scale-up of the Criminal Justice Administrative Records System

Publications Peer Reviewed Articles: ★ Corresponding author; ‡ Student advised by Si

1. S Williams, J Zou, Y Liu, **Y Si**, S Galea, and Q Chen (2024). Improving Survey Inference Using Administrative Records without Releasing Individual-level Continuous Data, *Statistics in Medicine* (Accepted)

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***, 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* (available online), doi
5. 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* (available online), doi
6. **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
7. **Y Si***, S Lee, and S Heeringa (2024), Population Weighting in Statistical Analysis, *JAMA-Internal Medicine*, 184(1), 98-99, doi
8. K Li[#], and **Y Si*** (2024). Embedded Multilevel Regression and Poststratification: Model-based Inference with Incomplete Auxiliary Information, *Statistics in Medicine*, 43(2), 256–278, doi
9. Z Lin[#], **Y Si***, and J Kang (2024). Latent Subgroup Identification in Image-on-scalar Regression, *Annals of Applied Statistics*, 18(1), 468–486, doi
10. 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
11. **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
12. **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
13. 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
14. **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

15. **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
16. 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
17. **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
18. 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
19. 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
20. 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
21. **Y Si*** and P Zhou[#] (2021). Bayes-raking: Bayesian Finite Population Inference with Known Margins, *Journal of Survey Statistics and Methodology*, 9(4), 833–855, doi
22. 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
23. 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
24. **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
25. **Y Si***, R Trangucci, J Gabry, and A Gelman (2020). Bayesian Hierarchical Weighting Adjustment and Survey Inference, *Survey Methodology*, 46(2), 181–214, doi
26. **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
27. J Wang[#], Y Jin, and **Y Si** (2018). Statistical Inference of Non-probability based Web Surveys, *Statistics and Decision*, 18, 10–14
28. S Makela[#], **Y Si***, and A Gelman (2018). Bayesian Inference under Cluster Sampling with Probability Proportional to Size, *Statistics in Medicine*, 37(26), 3849–3868, doi

29. 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
30. 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
31. 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
32. 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
33. **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
34. 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
35. **Y Si**^{*}, N Pillai, and A Gelman (2015). Bayesian Nonparametric Weighted Sampling Inference, *Bayesian Analysis*, 10(3), 605–625, doi
36. **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
37. S Makela[‡], **Y Si**, and A Gelman (2014). Statistical Graphics for Survey Weights, *Journal of Revista Columbiana De Estadística*, 37, 285–295, doi
38. **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
39. 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
40. **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

41. 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

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

Book Chapters

43. J Soulakova, T Vasilopoulos, and **Y Si** (2024), A Basic Overview of Statistics in Cancer Research, in *Springer book on Cancer Research Guidance for Clinicians*, edited by Jeffrey Huang (under review)

44. J Seeman, **Y Si**, and J Reiter (2024), Differentially Private Population Quantity Estimates via Survey Weight Regularization, in *NBER book on data privacy*, edited by Ruobin Gong, V. Joseph Hotz, and Ian M. Schmutte

45. **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)

46. S Makela[#], **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)

47. 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](#)

48. **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*

49. **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](#)

50. **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*

51. 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](#)
52. 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](#)
53. 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](#)
54. **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*
55. **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](#)
56. **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](#)
57. **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](#)
58. 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](#)
59. 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](#)
60. **Y Si** and J Reiter (2010). A New Approach to Protecting Confidentiality for Census Micro-data with Missing Values, *In JSM Proceedings, Survey Research Methods Section. Alexandria, VA: American Statistical Association*, [link](#)

Journal Submissions Under Peer Review

61. **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](#)
62. 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*

**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. Data Integration in Surveys and Clinical Trials, Population Dynamics and Health Program workshop series, University of Michigan, MI, Sept. 2024
2. Multilevel Regression and Poststratification, Training workshop at WAPOR, Seoul, South Korea, Jul. 2024, [link](#)
3. A Comparative Review of Data Integration Methods, Webinar, Survey Methods and Research Section, American Statistical Association, Apr. 2024, [link](#)
4. Introduction to Bayesian Inference, Bootcamp for the Schmidt AI in Science Postdocs, Michigan Institute for Data Science (MIDAS), University of Michigan, MI, Feb. 2023
5. Applying Weights to Longitudinal Survey Data, First workshop for the Network for Innovative Methods in Longitudinal Aging Studies, University of Michigan, MI, Sept. 2022, [link](#)
6. Multilevel Regression and Poststratification, Webinar, Survey Methods and Research Section, American Statistical Association, Oct. 2019, [link](#)

Invited seminar/conference talk

7. Joint Statistical Meetings (JSM), Portland, OR, Aug. 2024
8. The 2nd Joint Conference on Statistics and Data Science in China, Yunnan, China, Jul. 2024
9. The International Chinese Statistical Association (ICSA) Applied Statistics Symposium, Nashville, TN, Jun. 2024
10. The Conference on Small Area Estimation, Lima, Peru, Jun. 2024
11. Social, Behavioral, and Economic COVID Consortium Annual Meeting, Ann Arbor, MI, May. 2024
12. Primary Research Staff (PRS) Seminar, Survey Research Center, University of Michigan, MI, Apr. 2024
13. Working group in Small Area Estimation, University of Washington, WA, Apr. 2024
14. ENAR meeting, Baltimore, MD, Mar. 2024
15. The Panel Study of Income Dynamics Seminar Series, University of Michigan, MI, Nov. 2023
16. Department of Preventive Medicine, Northwestern University, Chicago, IL, Nov. 2023
17. Federal Committee on Statistical Methodology (FCSM) Research & Policy Conference, College Park, MD, Oct. 2023

18. PhD Seminar, Michigan Program in Survey and Data Science and Joint Program in Survey Methodology (MPSDS/JPSM), University of Michigan, MI, Sept. 2023
19. Social, Behavioral, and Economic COVID Consortium Annual Meeting, Sept. 2023
20. The 6th Baltic-Nordic Conference on Survey Statistics, Helsinki, Finland, Aug. 2023
21. Joint Statistical Meetings (JSM), Toronto, Canada, Aug. 2023
22. International Statistical Institute (ISI) World Statistics Congress, Ottawa, Canada, Jul. 2023
23. ICSA International Conference, Chengdu, China, Jul. 2023
24. The ICSA Applied Statistics Symposium, Ann Arbor, MI, Jun. 2023
25. Department of Biostatistics, University of Michigan, MI, Mar. 2023
26. MPSDS/JPSM Seminar Series (online), University of Michigan, MI, Feb. 2023
27. Department of Statistics, University of Missouri, Columbia, MO, Dec. 2022
28. Department of Statistics, University of California, Santa Cruz, CA, Nov. 2022
29. PhD Seminar, MPSDS/JPSM, University of Michigan, MI, Nov. 2022
30. Social, Behavioral, and Economic COVID Consortium Annual Meeting, Bethesda, MD, Sept. 2022
31. Joint Statistical Meetings (JSM), DC, Aug. 2022
32. The International Conference on Econometrics and Statistics (EcoSta 2022, online), Jun. 2022
33. The Statistical Society of Canada 2022 Meeting (online), Jun. 2022
34. The Conference on Small Area Estimation, College Park, MD, May. 2022
35. Forum on Coordinated Sample Design for Multiple Surveys (online), May. 2022
36. Multilevel Regression and Poststratification Working Group (online), Oct. 2021
37. PhD Seminar, Michigan Program in Survey and Data Science and Joint Program in Survey Methodology (MPSDS/JPSM), University of Michigan, MI, Sept. 2021
38. The International Chinese Statistical Association (ICSA) Applied Statistics Symposium (online), Sept. 2021
39. Joint Statistical Meetings (online), Aug. 2021
40. The Statistical Society of Canada 2021 Meeting (online), Jun. 2021
41. The International Indian Statistical Association Conference (online) May. 2021
42. Michigan Center on the Demography of Aging (MiCDA) Symposium (online), University of Michigan, MI, May. 2021
43. Primary Research Staff (PRS) Seminar (online), Survey Research Center, University of Michigan, MI, Jan. 2021
44. Department of Preventive Medicine (online), Northwestern University, Chicago, IL, Jan. 2021

45. The ICSA Applied Statistics Symposium (online), Houston, TX, Dec 2020
46. PhD Seminar (online), Program in Survey Methodology, University of Michigan, MI, Nov. 2020
47. Joint Statistical Meetings (online), Aug. 2020
48. MiCDA Symposium (online), University of Michigan, MI, May. 2020
49. 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
50. Michigan Program in Survey Methodology/Joint Program in Survey Methodology (MPSM/JPSM) Seminar Series (online), University of Michigan, MI, Apr. 2020
51. Conference on Multilevel Regression and Poststratification (online), New York, NY, Apr. 2020
52. 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
53. The Dialogue between Big Data and Survey Data in Social Science Research, Peking University, Beijing, China, Sept. 2019
54. School of Statistics, Renmin University of China, Beijing, China, Sept. 2019
55. Conference on Current Trends in Survey Statistics-A Satellite Conference to the 62nd ISI World Statistics Congress, National University of Singapore, Singapore, Aug. 2019
56. Junior Fellows Seminar, Joint Program in Survey Methodology, University of Maryland, MD, Jul. 2019
57. The ICSA Applied Statistics Symposium, Raleigh, NC, Jun. 2019
58. Bayesian Causal Inference Workshop, Columbus, OH, Jun. 2019
59. Department of Biostatistics, University of Michigan, MI, Oct. 2018
60. Junior Fellows Seminar, Joint Program in Survey Methodology, University of Maryland, MD, Jul. 2018
61. International Society for Bayesian Analysis (ISBA) 2018 Meetings, Edinburgh, UK, Jun. 2018
62. MPSM/JPSM Seminar Series, University of Michigan, MI, Jan. 2018
63. Department of Urology, University of Michigan, MI, Jan. 2018
64. Center for Youth & Social Issues, University of Michigan, MI, Jan. 2018
65. Joint Statistical Meetings, Baltimore, MD, Aug. 2017
66. 2016 Conference for Women in Statistics and Data Science, NC, Oct. 2016
67. Survey Research Center, Institute of Social Research, University of Michigan, MI, Sept. 2016
68. Department of Statistics, University of Missouri, MO, Mar. 2016
69. ENAR meeting, Austin, TX, Mar. 2016
70. The 8th International Conference of the ERCIM WG on Computational and Methodological Statistics, London, UK, Dec. 2015

71. Division of Biostatistics, Medical College of Wisconsin, WI, Oct. 2015
72. Joint Statistical Meetings, Seattle, WA, Aug. 2015
73. ISBS-DIA Joint Symposium on Biopharmaceutical Statistics, BJ, China, Jun. 2015
74. School of Statistics, Renmin University of China, BJ, China, Jun. 2015
75. Department of Statistics, University of Connecticut, CT, Apr. 2015
76. Department of Statistics, University of Wisconsin-Madison, WI, Mar. 2015
77. Department of Biostatistics and Epidemiology, University of Illinois at Chicago, IL, Oct. 2014
78. Department of Psychology, University of Notre Dame, IN, Sept. 2014
79. Computational Methods for Survey and Census Data in Social Sciences, Montreal, CA, Jun. 2014
80. Department of Statistics, Iowa State University, IA, Mar. 2014
81. Department of Mathematics and Statistics, American University, DC, Jan. 2014
82. Department of Population Health Sciences, University of Wisconsin-Madison, WI, Jan. 2014
83. The American Panel Study Workshop, Washington University at St. Louis, MO, Nov. 2013
84. Department of Mathematical Sciences, New Jersey Institute of Technology, NJ, Oct. 2013
85. Department of Epidemiology, Columbia University, NY, Apr. 2013
86. Department of Statistics, Columbia University, NY, Sept. 2012
87. Statistical Society of Canada 2012 Meeting, Guelph, ON, Canada Jun. 2012
88. American Institute for Research, DC, Apr. 2012
89. The Wharton School of Business, University of Pennsylvania, Philly, PA, Feb. 2012
90. Merck Co, Philly, PA, Feb. 2012
91. Joint Statistical Meetings, Vancouver, BC, Canada, Aug. 2010

Contributed

92. MIDAS Annual Data Science Symposium (online), University of Michigan, Nov. 2020
93. OpenDP Community Meeting (online), May. 2020
94. Value-based Purchasing Accountable Care Organizations (ACO) Working Group Presentation, University of Michigan, Oct. 2019
95. Joint Statistical Meetings, Denver, CO, Jul. 2019
96. Value-based Purchasing ACO Working Group Presentation, University of Michigan, Mar. 2019
97. Quantitative Methodology Program/Survey Methodology Program (QMP/SMP) Methodological Seminar, University of Michigan, Feb. 2019

98. Advances in Causal Inference, Survey Statistics, Disclosure Risk, and Missing Data, in Honor of Rod Little's 65th Birthday, Ann Arbor, MI, Oct. 2015
99. IMS Junior Researcher Conference, Seattle, WA, Aug. 2015
100. ENAR Spring Meeting, Miami, FL, Mar. 2015
101. Frontiers of Hierarchical Modeling in Observational Studies, Complex Surveys and Big Data, College Park, MD, May. 2014
102. OBayes Workshop and Bayes 250, Durham, NC, Dec. 2013
103. SAMSI Workshop on Computational Methods in Social Sciences, RTP, NC, Aug. 2013
104. Joint Statistical Meetings, Montreal, CA, Aug. 2013
105. The 25th Anniversary Celebration for Department of Statistical Science, Duke University, Durham, NC, Oct. 2012
106. Joint Statistical Meetings, San Diego, CA, Aug. 2012
107. Joint Statistical Meetings, Miami, FL, Aug. 2011
108. The 2011 International Workshop on Objective Bayes Methodology, Shanghai, China, Jun. 2011

**Teaching
Experience**

| University of Michigan MPSDS and University of Maryland JPSM | Instructor |
|---------------------------------------------------------------------|------------------------------------------------|
| SURVMETH 625 Applied Sampling | <i>Winter 2018, 2019, 2020, 2021, 2023</i> |
| SURVMETH 687 Applications of Statistical Modeling | <i>Fall 2018, 2019, 2020, 2021, 2022, 2024</i> |
| SURVMETH 614 Analysis Methods for Complex Sample Survey Data | <i>Summer 2018, 2019, 2020, 2022</i> |
| SURVMETH 699: Directed Research | <i>Fall 2020, 2023; Winter 2023, 2024</i> |

| University of Michigan Department of Statistics | Instructor |
|--------------------------------------------------------|--------------------|
| STATS 451 Bayesian Data Analysis | <i>Winter 2022</i> |

| University of Wisconsin-Madison | Instructor |
|----------------------------------------------------------------------------|------------------------|
| BMI/PHS 651 Advanced Regression Methods | <i>Fall 2015, 2016</i> |
| PHS 805 Epidemiologic Methods (Guest) | <i>Fall 2015, 2016</i> |
| STAT 992 Research Topics in Predictive Modeling for Clinical Biostatistics | <i>Fall 2015</i> |
| SIBS 546 Biostat Practicum | <i>Summer 2015</i> |
| BMI/PHS 652 Missing Data: Topics and Tools | <i>Spring 2015</i> |
| BMI/PHS 651 Advanced Regression Methods (Guest) | <i>Fall 2014</i> |
| BMI/PHS 551 Introduction to Biostatistics (Guest) | <i>Fall 2014</i> |

| Harvard University | Guest Lecturer |
|---------------------------|-----------------------|
| Missing Data Methods | <i>Spring 2014</i> |

Columbia University

Sample Surveys

Guest Lecturer*Fall 2013***Duke University**

Bayesian Statistics and Modern Computing

Generalized Linear Models

Probability/Statistical Models

Data Analysis and Statistical Inference

Teaching Assistant*Spring 2011**Fall 2010**Fall 2010**Fall 2009***Supervising and
advising**

• Mentees:

Soumojit Das, PhD, Postdoctoral Research Associate, University of Michigan, 2024-

Rayleigh Lei, PhD, Postdoctoral Research Associate, 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, 2021-2024

*(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, 2020-2024

*(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

- Academic Advising:

Yao Sun, MS, Michigan Program in Survey and Data Science, University of Michigan, 2024-
 Akari Oya, MS, Michigan Program in Survey and Data Science, University of Michigan, 2023-
(Winner, 2024 Rackham Conference Travel Grant)
 Yao (Aria) 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, 2015-2017
 Jesse Dirkman, MS, Department of Statistics, University of Wisconsin-Madison, 2015-2016
 Lan Luo, MS, Department of Statistics, University of Wisconsin-Madison, 2015-2016

- PhD Advising and Dissertation Committee:

Zikai Lin, PhD, Department of Biostatistics, University of Michigan, Co-chair, 2024
 Katherine Li, PhD, Department of Biostatistics, University of Michigan, Co-chair, 2024
 Alberto Arletti, PhD, Visiting PhD Scholar, University of Michigan, 2024
 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
 Jun Wang, PhD, Visiting PhD Scholar, 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

- ENAR student paper award committee, 2021-
- Technical working group member for the USDA-NASS IDEAL project, USDA, Washington, DC, 2021-2024
- 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, 2023-2024
- 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:
 - Journal of Educational and Behavioral Statistics,* 2024-
 - 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-)