

<b>Contact</b>	Rm 4014, ISR	<i>Phone:</i> 734-7646935 (Office)
<b>Information</b>	426 Thompson St Ann Arbor, MI 48104	<i>E-mail:</i> yajuan@umich.edu <i>Website:</i> <a href="http://www-personal.umich.edu/~yajuan">http://www-personal.umich.edu/~yajuan</a>
<b>Education</b>	<p><b>Duke University, Department of Statistical Science</b>, Durham, North Carolina, USA  <b>Ph.D.</b>, Statistical Science, 2012 ; <b>M.S.</b>, Statistical Science 2010  <i>Advisor:</i> Jerome P Reiter  <i>Thesis:</i> Nonparametric Bayesian Methods for Multiple Imputation of Large Scale Incomplete Categorical Data in Panel Studies</p> <p><b>Renmin University of China, School of Statistics</b>, Beijing, P.R.China  B.S., Statistics &amp; Actuarial Science, 2008</p> <p><b>The University of Hong Kong, Department of Statistics &amp; Actuarial Science</b>, Hong Kong  Exchange Student, Statistics &amp; Actuarial Science, 2007</p>	
<b>Professional Experience</b>	<p><b>University of Michigan</b>, Ann Arbor, MI</p> <p><b>Research Assistant Professor (tenure track)</b>, Survey Methodology Program, Survey Research Center, Institute for Social Research <i>Sep 2017 - present</i></p> <p>Member, Institute for Healthcare Policy &amp; Innovation <i>Jan 2018 - present</i></p> <p>Research Assistant Professor, Department of Biostatistics <i>Feb 2019 - present</i></p> <p>Affiliate, Population Dynamics and Health Program <i>May 2019 - present</i></p> <p>Affiliate, Michigan Center on the Demography of Aging <i>May 2019 - present</i></p> <p>Affiliate, Michigan Institute for Data Science <i>Nov 2019 - present</i></p> <p><b>University of Maryland</b>, College Park, MD</p> <p>Teaching faculty, Joint Program in Survey Methodology <i>Sep 2019 - present</i></p> <p><b>National Institute of Statistical Sciences</b></p> <p>Research Fellow <i>Feb 2020 - present</i></p> <p><b>University of Wisconsin-Madison</b>, Madison, WI</p> <p>Visiting Assistant Professor, Department of Population Health Sciences <i>Sep 2017 - present</i></p> <p>Assistant Professor (tenure track), Department of Biostatistics &amp; Medical Informatics and Department of Population Health Sciences <i>Aug 2014 - Aug 2017</i></p> <p>Affiliate, University of Wisconsin Survey Center <i>Feb 2015 - Aug 2017</i></p> <p>Affiliate, Center for Demography and Ecology <i>Oct 2015 - Aug 2017</i></p> <p>Affiliate, Department of Statistics <i>Nov 2015 - Aug 2017</i></p> <p><b>Columbia University</b>, New York, NY</p>	

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**

- 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. NIH/NICHD R21HD105204-01                                                                           | 05/01/2021–04/30/2023 | 2.40 Calendar |
| Total Award Amount: \$400,166                                                                         |                       |               |
| Novel Approaches to Adjusting for Population Heterogeneity and Representation in Neuroimaging Studies |                       |               |
| 2. NISS/NCES                                                                                          | 01/01/2020–12/31/2021 | 2.40 Calendar |
| Total Award Amount: \$250,000                                                                         |                       |               |
| Nonresponse Bias Adjustment for Large-scale Education Surveys                                         |                       |               |
| 3. 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     |                       |               |
| 4. 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)                  |                       |               |
| 5. 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                        |                       |               |
| 6. 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: Zhao at Fred Hutchinson Cancer Research Center)

7. NSF/MMS SES 1760133 10/01/2015–09/30/2020 1.92 Calendar

Total Award Amount: \$197,949

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

### **Principal Investigator (Internal Funding)**

8. 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

9. 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

10. UM/MIDAS 01/01/2020–12/31/2021 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

11. UM/SRC-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)**

12. 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: Alexander)

13. 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: Hollingsworth)

14. 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: McCabe)

15. 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: Hollingsworth)

16. 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: Hollingsworth)
17. 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: Greenberg)

**Co-Investigator (Internal Funding)**

18. UW Health 07/01/2015–08/31/2017 0.96 Calendar  
 Accountable Care Organization Reporting Project (PI: Smith)
19. 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/NIDA U24 09/01/2021–08/31/2026 1.20 Calendar  
 The Healthy Brain and Child Development National Consortium Administrative Core  
 UM Subcontract (PI: Chambers at University of California, San Diego)
2. NIH/NIDDK R01 09/01/2021–08/31/2026 1.20 Calendar  
 Statistical Methods for Healthcare in Complex Patients with Diabetes  
 UM Subcontract (PI: Zhao at Fred Hutchinson Cancer Research Center)

**Co-Investigator**

3. NIH/NIMH R01 09/01/2021–08/31/2026 1.20 Calendar  
 Neural, Neurodevelopmental, and Behavioral Mechanisms of Psychopathology in the Transition from  
 Adolescence to Early Adulthood: A Longitudinal Investigation
4. NIH/NHLBI R01 09/01/2021–08/31/2026 1.20 Calendar  
 Emergent Behavioral and Physiological Cardiovascular Health Risk Factors in the Transition from  
 Adolescence to Adulthood: A Longitudinal Investigation
5. NSF 06/01/2021–06/30/2024 0.60 Calendar  
 HNDS-I: Multi-Network Dynamics of Science (MiNDS)
6. UM/MIDAS 06/01/2021–05/31/2022 0.40 Calendar  
 Population Developmental Health from Adolescence through Early Adulthood: A Data Science  
 Model
7. NIH/NIEHS R01 04/01/2021–03/31/2024 1.20 Calendar  
 Environmental Exposures, Developmental Psychopathology, and Mediating Mechanisms: A Longi-  
 tudinal Investigation

Trajectories of Substance Use, Substance Disorder, and Psychopathology in Adolescence and Emerging Adulthood: Developmental Patterns and Processes

**Publications**

**Peer Reviewed Articles:** ★ Corresponding author; ‡ Student advised by YS

1. 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 (forthcoming)*
2. 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 (available online)*
3. 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 (available online)*
4. K Constante, E Huntley, **Y Si**, C Wagner, E Schillinger, and D Keating (2020). Conceptualizing Protective Family Context and Its Effect on Substance Use: Comparisons across Diverse Ethnic-Racial Youth, *Substance Abuse (available online)*
5. **Y Si**★ and P Zhou‡ (2020). Bayes-raking: Bayesian Finite Population Inference with Known Margins, *Journal of Survey Statistics and Methodology (smaa008, available online)*
6. R Hsi, P Yan, D Goldfarb, A Egbuji, **Y Si**, V Shahinian, and J Hollingsworth (2020). Comparison of Selective Versus Empiric Pharmacologic Preventative Therapy with Kidney Stone Recurrence, *Urology 149*, 81–88
7. **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
8. **Y Si**★, R Trangucci, J Gabry, and A Gelman (2020). Bayesian Hierarchical Weighting Adjustment and Survey Inference, *Survey Methodology*, 46(2), 181–214
9. **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*
10. J Wang‡, Y Jin, and **Y Si** (2018). Statistical Inference of Non-probability based Web Surveys, *Statistics and Decision*, 18, 10–14
11. 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
12. 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
13. 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

14. 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
15. 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
16. **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
17. 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
18. **Y Si\***, N Pillai, and A Gelman (2015). Bayesian Nonparametric Weighted Sampling Inference, *Bayesian Analysis*, 10(3), 605–625
19. **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
20. S Makela<sup>‡</sup>, **Y Si**, and A Gelman (2014). Statistical Graphics for Survey Weights, *Journal of Revista Columbiana De Estadística*, 37, 285–295
21. **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
22. 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
23. **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

### **Book Chapters**

24. S Makela<sup>‡</sup>, **Y Si**, and A Gelman (2016). Graphical Visualization of Polling Results, in *Oxford Handbook on Polling and Polling Methods*, edited by Lonna Atkeson and Michael Alvarez

### **Other Publications (Technical Reports, Proceedings, and Newspaper Articles)**

25. **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*
26. 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*
27. 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*
28. **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*
29. **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*
30. **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*
31. **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*
32. 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*
33. 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*
34. **Y Si** and J Reiter (2010). A New Approach to Protect Confidentiality for Census Microdata with Missing Values, *In JSM Proceedings, Survey Research Methods Section. Alexandria, VA: American Statistical Association*

#### **Journal Submissions Under Peer Review**

35. **Y Si\***, R Little, Y Mo, and N Sedransk (2021). A Case Study of Nonresponse Bias Analysis, *Journal of Survey Statistics and Methodology*, <https://arxiv.org/abs/2104.04432>
36. **Y Si\***, S Heeringa, D Johnson, R Little, W Liu, F Pfeffer, and T Raghunathan (2021). Multiple Imputation with Massive Data: An Application to the Panel Study of Income Dynamics, *Journal of Survey Statistics and Methodology* (revision submitted), <http://arxiv.org/abs/2007.03016>
37. **Y Si\*** (2021). On the Use of Auxiliary Variables in Multilevel Regression and Poststratification, *Statistical Science* (in revision), <https://arxiv.org/abs/2011.00360>
38. 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, *JAMA Pediatrics*

39. K Grimaldi, E Huntley, **Y Si**, C Wagner, and D Keating (2021). The Role of Parental Involvement and Monitoring in Adolescent Alcohol-Related Health Risk Behaviors, *Journal of Studies on Alcohol and Drugs*

40. 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. Asymptomatic Recurrence Detection and Survival in Stage II-III Breast Cancer, *Journal of the National Cancer Institute*

**Software  
Development**

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

**Presentations**     **Invited**

1. The International Chinese Statistical Association (ICSA) Applied Statistics Symposium (online), Sep. 2021 (upcoming)
2. Joint Statistical Meetings (JSM), Seattle, WA, Aug. 2021 (upcoming)
3. The Statistical Society of Canada 2021 Meeting, Newfoundland, Canada, Jun. 2021 (upcoming)
4. The International Indian Statistical Association Conference (online) May. 2021
5. Michigan Center on the Demography of Aging (MiCDA) Symposium (online), University of Michigan, MI, May. 2021
6. Primary Research Staff (PRS) Seminar (online), Survey Research Center, University of Michigan, MI, Jan. 2021
7. Department of Preventive Medicine (online), Northwestern University, Chicago, IL, Jan. 2021
8. The ICSA Applied Statistics Symposium (online), Houston, TX, Dec 2020
9. PhD Seminar (online), Program in Survey Methodology, University of Michigan, MI, Nov. 2020
10. Joint Statistical Meetings (online), Aug. 2020
11. MiCDA Symposium (online), University of Michigan, MI, May. 2020
12. 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
13. Michigan Program in Survey Methodology/Joint Program in Survey Methodology (MPSM/JPSM) Seminar Series (online), University of Michigan, MI, Apr. 2020
14. Conference on Multilevel Regression and Poststratification (online), New York, NY, Apr. 2020
15. 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
16. Webinar, Survey Methods and Research Section, American Statistical Association, Oct. 2019
17. The Dialogue between Big Data and Survey Data in Social Science Research, Peking University, Beijing, China, Sep. 2019



18. School of Statistics, Renmin University of China, Beijing, China, Sep.2019
19. Conference on Current Trends in Survey Statistics-A Satellite Conference to the 62nd ISI World Statistics Congress, National University of Singapore, Singapore, Aug. 2019
20. Junior Fellows Seminar, Joint Program in Survey Methodology, University of Maryland, MD, Jul. 2019
21. The ICSA Applied Statistics Symposium, Raleigh, NC, Jun. 2019
22. Bayesian Causal Inference Workshop, Columbus, OH, Jun. 2019
23. Department of Biostatistics, University of Michigan, MI, Oct. 2018
24. Junior Fellows Seminar, Joint Program in Survey Methodology, University of Maryland, MD, Jul. 2018
25. International Society for Bayesian Analysis (ISBA) 2018 Meetings, Edinburgh, UK, Jun. 2018
26. MPSM/JPSM Seminar Series, University of Michigan, MI, Jan. 2018
27. Department of Urology, University of Michigan, MI, Jan. 2018
28. Center for Youth & Social Issues, University of Michigan, MI, Jan. 2018
29. Joint Statistical Meetings, Baltimore, MD, Aug. 2017
30. 2016 Conference for Women in Statistics and Data Science, NC, Oct. 2016
31. Survey Research Center, Institute of Social Research, University of Michigan, MI, Sept. 2016
32. Department of Statistics, University of Missouri, MO, Mar. 2016
33. ENAR meeting, Austin, TX, Mar. 2016
34. The 8th International Conference of the ERCIM WG on Computational and Methodological Statistics, London, UK, Dec. 2015
35. Division of Biostatistics, Medical College of Wisconsin, WI, Oct. 2015
36. Joint Statistical Meetings, Seattle, WA, Aug. 2015
37. ISBS-DIA Joint Symposium on Biopharmaceutical Statistics, BJ, China, Jun. 2015
38. School of Statistics, Renmin University of China, BJ, China, Jun. 2015
39. Department of Statistics, University of Connecticut, CT, Apr. 2015
40. Department of Statistics, University of Wisconsin-Madison, WI, Mar. 2015
41. Department of Biostatistics and Epidemiology, University of Illinois at Chicago, IL, Oct. 2014
42. Department of Psychology, University of Notre Dame, IN, Sept. 2014
43. Computational Methods for Survey and Census Data in Social Sciences, Montreal, CA, Jun. 2014
44. Department of Statistics, Iowa State University, IW, Mar. 2014
45. Department of Mathematics and Statistics, American University, DC, Jan. 2014

46. Department of Population Health Sciences, University of Wisconsin-Madison, WI, Jan. 2014
47. The American Panel Study Workshop, Washington University at St. Louis, MO, Nov. 2013
48. Department of Mathematical Sciences, New Jersey Institute of Technology, NJ, Oct. 2013
49. Department of Epidemiology, Columbia University, NY, Apr. 2013
50. Department of Statistics, Columbia University, NY, Sept. 2012
51. Statistical Society of Canada 2012 Meeting, Guelph, ON, Canada Jun. 2012
52. American Institute for Research, DC, Apr. 2012
53. The Wharton School of Business, University of Pennsylvania, Philly, PA, Feb. 2012
54. Merck Co, Philly, PA, Feb. 2012
55. Joint Statistical Meetings, Vancouver, BC, Canada, Aug. 2010

### **Contributed**

56. Nonresponse Workshop, Stockholm, Sweden, Oct. 2021 (upcoming)
57. MIDAS Annual Data Science Symposium (online), University of Michigan, Nov. 2020
58. OpenDP Community Meeting (online), May. 2020
59. Value-based Purchasing Accountable Care Organizations (ACO) Working Group Presentation, University of Michigan, Oct. 2019
60. Joint Statistical Meetings, Denver, CO, Jul. 2019
61. Value-based Purchasing ACO Working Group Presentation, University of Michigan, Mar. 2019
62. Quantitative Methodology Program/Survey Methodology Program (QMP/SMP) Methodological Seminar, University of Michigan, Feb. 2019
63. Advances in Causal Inference, Survey Statistics, Disclosure Risk, and Missing Data, in Honor of Rod Little's 65th Birthday, Ann Arbor, MI, Oct. 2015
64. IMS Junior Researcher Conference, Seattle, WA, Aug. 2015
65. ENAR Spring Meeting, Miami, FL, Mar. 2015
66. Frontiers of Hierarchical Modeling in Observational Studies, Complex Surveys and Big Data, College Park, MD, May. 2014
67. OBayes Workshop and Bayes 250, Durham, NC, Dec. 2013
68. SAMSI Workshop on Computational Methods in Social Sciences, RTP, NC, Aug. 2013
69. Joint Statistical Meetings, Montreal, CA, Aug. 2013
70. The 25th Anniversary Celebration for Department of Statistical Science, Duke University, Durham, NC, Oct. 2012
71. Joint Statistical Meetings, San Diego, CA, Aug. 2012

72. Joint Statistical Meetings, Miami, FL, Aug. 2011

73. The 2011 International Workshop on Objective Bayes Methodology, Shanghai, China, Jun. 2011

**Teaching  
Experience**

**University of Michigan and University of Maryland**

**Instructor**

SURVMETH 625 Applied Sampling

Winter 2021 4.0/5.0 (course), 4.8/5.0 (instructor) 19 students, Co-Instr

Winter 2020 4.9/5.0 (course), 5.0/5.0 (instructor) 21 students, Co-Instr

Winter 2019 4.8/5.0 (course), 4.8/5.0 (instructor) 24 students, Co-Instr

Winter 2018 4.1/5.0 (course), 4.3/5.0 (instructor) 15 students, Co-Instr

SURVMETH 687 Applications of Statistical Modeling

Fall 2020 4.8/5.0 (course), 5.0/5.0 (instructor) 25 students

Fall 2019 4.2/5.0 (course), 4.3/5.0 (instructor) 29 students

Fall 2018 4.0/5.0 (course), 4.8/5.0 (instructor) 21 students, Co-Instr

SURVMETH 614 Analysis Methods for Complex Sample Survey Data

Summer 2020 34 students, Co-Instr

Summer 2019 11 students

Summer 2018 15 students, Co-Instr

SURVMETH 699: Directed Research

Fall 2020 1 student enrolled

**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

*Spring 2011*

Generalized Linear Models

*Fall 2010*

Probability/Statistical Models

*Fall 2010*

**Student advising** • Research Assistants:

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

Katherine Li, Department of Biostatistics, University of Michigan, MS, 2018-2020, PhD, 2020-  
(*Winner, 2019 Michigan Institute for Data Science Symposium Student Poster Award*)

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:

Chendi Zhao, MS, Michigan Program in Survey Methodology, University of Michigan, 2020-

Junhan Tang, MS, Michigan Program in Survey Methodology, University of Michigan, 2019-

Shiyu Zhang, PhD, Michigan Program in Survey Methodology, University of Michigan, 2018-

Hanh Bui, MS, Michigan Program in Survey Methodology, University of Michigan, 2018-

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 Dissertation Committee:

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:

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**

### **Committee Memberships**

- 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
- Conference on Multilevel Regression and Poststratification, Columbia University, 2020
- Master student admission, Michigan Program for Survey Methodology/Joint Program in Survey Methodology, University of Michigan/University of Maryland, 2019-
- Seminar organization, Survey Research Center, University of Michigan, 2018-2020
- PhD qualification exam committee chair, Michigan Program for Survey Methodology/Joint Program in Survey Methodology, University of Michigan/University of Maryland,, 2018-
- PhD student admission, Michigan Program for Survey Methodology/Joint Program in Survey Methodology, 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**

- Grant reviewer for Propelling Original Data Science Grants, MIDAS, University of Michigan, 2021
- Roundtable discussion organizer for “Bridging data science and survey methodology in research and educational programs”, JSM, 2020
- Faculty judge for Michigan Student Symposium for Interdisciplinary Statistical Sciences, 2020
- Reviewer for Student Paper Competition, the International Conference on Health Policy Statistics (ICHPS), 2019
- Grant reviewer for Office of Research Faculty Grants and Awards, University of Michigan, 2017
- Grant reviewer for NSF-MMS, 2016, 2020
- Invited session organizer for:  
“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
- 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
- Session chair for ENAR annual meetings, 2015, 2016, 2017
- Session chair for JSM, 2011, 2013, 2015, 2019, 2020

### **Editorial Service**

- Associate Editor for:  
*Journal of Official Statistics*, 2019-
- Referee for Journals:  
*Journal of the American Statistical Association* (4 articles)  
*Biometrika* (2 articles)  
*Annals of Applied Statistics* (5 articles)  
*Biometrics* (2 articles)  
*Bayesian Analysis* (5 articles)  
*Journal of the Royal Statistical Society-Series B*  
*Journal of Survey Statistics and Methodology* (5 articles)  
*International Statistical Review* (3 articles)  
*Journal of Computational and Graphical Statistics*  
*Survey Methodology*  
*American Journal of Epidemiology*  
*American Journal of Public Health*  
*Biometrical Journal*  
*Behavior Research Methods*  
*British Journal of Mathematics & Computer Science*  
*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 Educational and Behavioral Statistics*

*Journal of Machine Learning Research*  
*Journal of Official Statistics* (2 articles)  
*Journal of Probability and Statistics*  
*Journal of Statistical Software*  
*Journal of Computational and Applied Mathematics*  
*Communications in Statistics–Theory and Methods*  
*Methodology*  
*Population Health Metrics*  
*Population Research and Policy Review*  
*Psychological Methods* (2 articles)  
*Public Health Reports*  
*STAT*  
*Statistical Analysis and Data Mining* (2 articles)  
*Statistical methods in Medical Research*  
*Statistica Sinica*  
*The American Statistician*  
*Statistics in Medicine*  
*Scandinavian Journal of Statistics Sankhya A*  
*Statistics and Probability Letters* (2 articles)  
*Statistics and Computing*  
*Electronic Journal of Statistics*  
*Sociological Methods and Research*  
*Spatial Statistics*

**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-)