

CURRICULUM VITAE

Wang Miao

Assistant Professor	Zihua Building
Department of Probability and Statistics	Peking University, Beijing 100871, China
School of Mathematical Sciences and	mwfy@pku.edu.cn
Center for Statistical Science	https://www.math.pku.edu.cn/teachers/mwfy
Peking University	Google Scholar

Education

PhD	Statistics	Peking University	2017
		Advisor: Zhi Geng	
BS	Mathematics and Applied Mathematics	Peking University	2012
	Minor in Philosophy	Peking University	2013

Experience

Assistant Professor	
2020–	School of Mathematical Sciences, Peking University
Assistant Professor	
2018–2020	Guanghua School of Management, Peking University
Postdoctoral Fellow	
2017–2018	Department of Biostatistics, Harvard University
Visiting Scholar	
2014–2016	Department of Biostatistics, Harvard University
Visiting Scholar	
2020.01–03	The Wharton School, University of Pennsylvania

Awards and Honors

2022	Chang Jiang Young Scholar	Ministry of Education of China
	<i>(This is a prestigious academic honor given to researchers under 38 years old in China.)</i>	
2020	Best Teaching Design Award	Peking University
2016	The Zhong Jiaqing Award of Best Paper	Chinese Society of Probability and Statistics
2016	President Scholarship	Peking University
2015	Visiting Student Scholarship	Harvard University
2015	Honor of Merit Student	Peking University
2015	Huawei Scholarship	Peking University
2014	Chinese Government Scholarship	China Scholarship Council
2013	Guanghua Scholarship	Peking University

Teaching

Instructor

Advanced Statistics	Fall 2023
Introduction to Probability and Statistics	Spring 2023
Advanced Statistics	Fall 2022
Semiparametric Model	Spring 2022
Causal Inference	Spring 2021
R Programming and Data Graphics	Fall 2020
Introduction to Probability and Statistics	Spring 2020
R Programming and Data Graphics	Fall 2019
Introduction to Probability and Statistics	Spring 2019
Statistical Culture and Practice	Fall 2018

Short Courses

1. Proximal inference, synthetic control and missing data analysis, Zhejiang University, June 2023
2. The potential outcome framework for causal inference, the CCF Advanced Disciplines Lectures 130 “Causal discovery and decision”, September 2022

3. Confounding analysis in causal inference, Beijing Technology and Business University, July 2022
4. Causal inference and observational studies,
Capital Normal University, July 2022
Children’s Hospital of Chongqing Medical University, July 2023
5. Confounding and nonresponse adjustment for observational studies,
DMED, October 2021;
Beihang University, December 2021
6. Confounding adjustment for causal inference, Fudan University, July 2021

Advisees

PhD students	Xinyu Li 2018–2023; <i>National Scholarship, President Scholarship, Best Paper Award on the 2021 National Annual Biostatistics Conference Best Paper Award on the 6th Conference for PhD Students in Statistics</i> Yilin Li 2019–2024; <i>President Scholarship</i> Ping Zhang 2022–; Naiwen Ying 2023–
Master students	Yujing Gao 2018–2020; Peiyu He 2022–2024; <i>Best Poster Award on the 8th Peking–Tsinghua Joint Statistics Colloquium</i>
Undergraduate students	<i>Graduated in 2021:</i> Xugao Chen, Hongzi Li <i>Graduated in 2022:</i> Peiyu He, Ping Zhang, Hongyu Chen, Chenghao Li <i>Graduated in 2023:</i> Naiwen Ying, Yingqing Guo, Zhihan Huang Zetao Wang, Zhanran Lin <i>Graduated in 2024:</i> Huiying Zhong, Yihui He, Changxiao Xie, Yuyang Tang

Grants

1. **National Key R&D Program of China.** The theory, methodology and application of causal inference in artificial intelligence

Principal investigator, 3000K CNY, 2022.12–2027.11

(This is a prestigious grant in China on the level of US NSF Career Award)

2. **National Science Funding of China.** Causal modeling and inference for studies without controls and mediation analysis

Principal investigator, 510K CNY, 2021.01–2024.12

3. **National Science Funding of China.** High-resolution ensemble Kalman filter and related filter methods and carbon source/sink fusion algorithm

Participant, 470/14600K CNY, 2023.01– 2027.12

4. **Beijing Natural Science Foundation.** Statistical Theory and Algorithmic Foundations for Artificial Intelligence

Participant, 300/2000K CNY, 2019.10–2023.10

5. **Beijing Academy of Artificial Intelligence.** Statistical Theory for Causal Inference and Over-parameterized Modeling

Participant, 700/1400K CNY, 2019.06–2021.05

6. **NIH/NIGMS R01GM139926.** Accounting for Hidden Bias in Vaccine Studies: A Negative Control Framework

Consultant

Academic Services

Guest Editor for Special issue “Causal Inference, Probability Theory and Graphical Concepts” in journal *Computation*.

Associate Editor for Chinese Journal of Applied Probability and Statistics

Vice President for Branch for Causal Inference, Chinese Association for Applied Statistics

Vice President for Chinese Statistical Association of Young Scholars

Vice Secretary-general for Branch for Machine Learning, Chinese Association for Applied Statistics

Edit and review certain entries in statistics for the third edition of *The Encyclopedia of China*

Chair for weekly seminar at Center for Statistical Science, Peking University. Since July 2018.

Referee for *Biometrika*; *JASA*; *JRSSB*; *JRSSA*; *Statistics in Medicine*; *Biometrics*; *Statistica Sinica*; *Annals of Statistics*; *Epidemiologic Methods*; *Journal of Machine Learning Research*; *American Journal of Epidemiology*; *Journal of Statistical Planning and Inference*; *Statistical Papers*; *AI STAT*; *Management Science*; *Environmental Research*; *IEEE*; *Journal of Multivariate Analysis*; *Canadian Journal of Statistics*; *UAI 2022*; *Journal of Business & Economic Statistics*; *Scandinavian Journal of Statistics*; *Biostatistics & Epidemiology Statistics and Probability*; *Computational Statistics and Data Analysis*; *Epidemiology*; *Operations Research*; *Lifetime Data Analysis*; *Artificial Intelligence*; *Annals of Applied Statistics*; *Journal of Political Economy*

Conferences Organizing

1. Organizing committee member, the 2024 Pacific Causal Inference Conference, July 2024.
2. Coordinator, the 8th Peking–Tsinghua Joint Statistics Colloquium, June 2024.
3. Program committee member, Organizing committee member, Chinese Causal Inference Conference (CCIC), March 2024.
4. Session organizer for the 3rd Conference on Big Data Statistics, Jinan, November 2023.
5. Organizing committee member, the 2023 Pacific Causal Inference Conference, September 2023.
6. Program committee member, Machine Learning and Statistics (ML&STAT) Conference, August 2023.
7. Organizing committee member, China Joint Statistical and Data Science Conference (JSDCS), Beijing, July 2023.
8. Program committee member, organizing committee member, Chinese Causal Inference Conference (CCIC), May 2023.
9. Session organizer for Missing data analysis and its application, 16th International Conference on Computational and Financial Econometrics, December 2022.
10. Organizing committee member, the 2022 Pacific Causal Inference Conference, September 2022.

11. Coordinator, the First PKU Alumni Forum in Statistics, July 2022.
12. Coordinator, the 6th Peking–Tsinghua Joint Statistics Colloquium, June 2022.
13. Session organizer for Causal inference with unobserved confounders, Atlantic Causal Inference Conference, May 2018.
14. Session organizer for Addressing unmeasured confounding using negative controls, Atlantic Causal Inference Conference, May 2017.

Membership

Society for Causal Inference (SCI);

Chinese Mathematical Society;

Chinese Association for Applied Statistics;

International Chinese Statistical Association (ICSA)

Research Interests

- Causal inference: Specificity analysis; Causal attribution; Causal fairness; Exposure-outcome-wide causal inference; Proximal inference and Negative control; Synthetic control; Confounding; Instrumental variable; Observational study; Mediation; Sensitivity analysis; Measurement error
- Missing data analysis: Callback data; Multivariate missing data; Nonignorable missing data
- Semiparametric inference and doubly robust estimation
- Big data and artificial intelligence: Data fusion; Transfer learning; Machine learning; Sampling design in big data.
- Application of statistics in economic, epidemiological, political and biomedical studies

Patents

Methods for improving efficiency of clinical trials with external control data. Number: ZL 2021 1 0063096.6; Date: March 22, 2024

Publications

Published Papers

1. Miao, W., P. Ding, and Z. Geng (2016). Identifiability of normal and normal mixture models with nonignorable missing data. *Journal of the American Statistical Association* 111, 1673–1683
Winner of the Zhongjiaqing Best Paper Award (to Miao) given by Chinese Society of Probability and Statistics.
2. Miao, W. and E. Tchetgen Tchetgen (2016). On varieties of doubly robust estimators under missingness not at random with a shadow variable. *Biometrika* 103, 475–482
3. Miao, W. and E. Tchetgen Tchetgen (2017). Invited commentary: Bias attenuation and identification of causal effects with multiple negative controls. *American Journal of Epidemiology* 185, 950–953
4. Miao, W., Z. Geng, and E. Tchetgen Tchetgen (2018). Identifying causal effects with proxy variables of an unmeasured confounder. *Biometrika* 105, 987–993
5. Miao, W. and E. Tchetgen Tchetgen (2018). Identification and inference with non-ignorable missing covariate data. *Statistica Sinica* 28, 2049–2067
6. Sun, B., L. Liu, W. Miao, K. Wirth, J. Robins, and E. Tchetgen Tchetgen (2018). Semiparametric estimation with data missing not at random using an instrumental variable. *Statistica Sinica* 28, 1965–1983
7. Miao, W., C. Liu, and Z. Geng (2018). Statistical approaches for causal inference. *Scientia Sinica Mathematica* 48, 1753–1778
8. Geng, Z., Y. Liu, C. Liu, and W. Miao (2019). Evaluation of causal effects and local structure learning of causal networks. *Annual Review of Statistics and Its Application* 6, 103–124
9. Liu, L., W. Miao, B. Sun, J. Robins, and E. Tchetgen Tchetgen (2020). Identification and inference for marginal average treatment effect on the treated with an instrumental variable. *Statistica Sinica* 30, 1517–1541
10. Kuang, K., L. Li, Z. Geng, L. Xu, K. Zhang, B. Liao, H. Huang, P. Ding, W. Miao, and Z. Jiang (2020). Causal inference. *Engineering* 6, 253–263

11. Shi, X., W. Miao, J. C. Nelson, and E. Tchetgen Tchetgen (2020). Multiply robust causal inference with double negative control adjustment for categorical unmeasured confounding. *Journal of the Royal Statistical Society: Series B* 82, 521–540
12. Li, H., W. Miao, Z. Cai, X. Liu, T. Zhang, F. Xue, and Z. Geng (2020). Causal data fusion methods using summary-level statistics for a continuous outcome. *Statistics in Medicine* 39, 1054–1067
13. Shi, X., W. Miao, and E. Tchetgen Tchetgen (2020). A selective review of negative control methods in epidemiology. *Current Epidemiology Reports* 7, 190–202
14. Wang, R., Q. Wang, W. Miao, and X. Zhou (2024). Sharp bounds for variance of treatment effect estimators in the finite population in the presence of covariates. *Statistica Sinica* 34, 999–1021
15. Shi, X., Z. Pan, and W. Miao (2022). Data integration in causal inference. *WIREs Computational Statistics*, e1581.
16. Miao, W., W. Li, W. Hu, R. Wang, and Z. Geng (2022). Invited commentary: Estimation and bounds under data fusion. *American Journal of Epidemiology* 191, 674–678
17. Sun, B. and W. Miao (2022). On semiparametric instrumental variable estimation of average treatment effects through data fusion. *Statistica Sinica* 32, 569–590
18. Tchetgen Tchetgen, E., O. Dukes, X. Shi, W. Miao, and D. Richardson (2022). Errors-in-variables bias in synthetic controls: a cautionary note and a potential solution. *American Journal of Epidemiology* 191, 965–966
19. Li, K. Q., X. Shi, W. Miao, and E. Tchetgen Tchetgen (2023). Double negative control inference in test-negative design studies of vaccine effectiveness. *Journal of the American Statistical Association*, in press.
20. Wang, R., Q. Wang, and W. Miao (2023). A robust fusion-extraction procedure with summary statistics in the presence of biased sources. *Biometrika* 110, 1023–1040
21. Li, YL., W. Miao, I. Shpitser, and E. Tchetgen Tchetgen (2023). A self-censoring model for multivariate nonignorable nonmonotone missing data. *Biometrics* 79, 3203–3214
22. Li, X., W. Miao, F. Lu, and X.-H. Zhou (2023). Improving efficiency of inference in clinical trials with external control data. *Biometrics* 79, 394–403

Winner of the Best Paper Award (to Li) on the 2021 National Annual Biostatistics Conference.

23. Ying, A., W. Miao, X. Shi, and E. Tchetgen Tchetgen (2023). Proximal causal inference for complex longitudinal studies. *Journal of the Royal Statistical Society: Series B* 85, 684–704

Winner of the David P. Byar Award (to Ying) in Biometrics Section on JSM2022.

24. Miao, W. and Z. Geng (2022). Causal inference, observational studies and 2021 Nobel Prize for Economics. *Systems Science*, vol 3.
25. Ying, N., W. Miao, and Z. Geng (2022). Causal effect evaluation and causal discovery. *Military Operations Research and Assessment* 3, 10–19.
26. Zhang, J., W. Li, W. Miao, E. Tchetgen Tchetgen (2023). Proximal Causal Inference without Uniqueness Assumptions. *Statistics and Probability Letters* 198, 109836
27. Cui, Y., H. Pu, X. Shi, W. Miao, and E. Tchetgen Tchetgen (2023). Semiparametric proximal causal inference. *Journal of the American Statistical Association*, in press.
28. Miao, W., L. Liu, Y. Li, E. Tchetgen Tchetgen, and Z. Geng (2023). Identification and semiparametric efficiency theory of nonignorable missing data with a shadow variable. *ACM/IMS Journal of Data Science*, in press.
29. Li, W., W. Miao, and E. Tchetgen Tchetgen (2023). Non-parametric inference about mean functionals of non-ignorable non-response data without identifying the joint distribution. *Journal of the Royal Statistical Society: Series B* 85, 913–935
30. Miao, W., W. Hu, E. L. Ogburn, and X. Zhou (2023). Identifying effects of multiple treatments in the presence of unmeasured confounding. *Journal of the American Statistical Association* 118, 1953–1967
31. Tchetgen Tchetgen, E., A. Ying, Y. Cui, X. Shi, and W. Miao (2023). An introduction to proximal causal learning. *Statistical Science*, in press.
32. Feng Xie, Zhengming Chen, Shanshan Luo, Wang Miao, Ruichu Cai, Zhi Geng (2024). Automating the Selection of Proxy Variables of Unmeasured Confounders. Proceedings of the 41st International Conference on Machine Learning, Vienna, Austria.
33. Qiu, H., X. Shi, W. Miao, E. Dobriban, and E. Tchetgen Tchetgen (2024). Doubly robust proximal synthetic controls. *Biometrics*, in press.

Papers Under Review

34. Shi, X., W. Miao, M. Hu, and E. Tchetgen Tchetgen (2022). Theory for identification and Inference with Synthetic Controls: A Proximal Causal Inference Framework. Revision invited by *Journal of the American Statistical Association*.
35. Miao, W., X. Li, and B. Sun (2022). A stableness of resistance model for nonresponse adjustment with callback. Revision invited by *Journal of the Royal Statistical Society: Series B*.

Winner of the Best Paper Award (to Li) on the 6th Conference for PhD Students in Statistics

36. Hu, W., R. Wang, W. Li, and W. Miao (2023). Paradoxes and resolutions for semi-parametric fusion of individual and summary data. Revision invited by *Biometrika*.
37. Li, K. Q., X. Shi, W. Miao, and E. Tchetgen Tchetgen (2023). Doubly robust proximal causal inference under confounded outcome-dependent sampling
38. Miao, W., X. Shi, and E. Tchetgen Tchetgen (2018). A confounding bridge approach for double negative control inference on causal effects
39. Luo, S., W. Li, W. Miao, and Y. He (2022). Identification and estimation of causal effects in the presence of confounded principal strata
40. Sun, B., W. Miao, and D. Wickramarachchi (2023). A coherent likelihood parametrization for doubly robust estimation of nonignorable nonresponse models using instrumental variables. Revision invited by *Statistica Sinica*
41. Wang, R., Q. Wang, and W. Miao (2023). Optimal two-phase sampling designs toward a general scalar or multidimensional parameter

Preprints

42. Miao, W. (2023). Specificity analysis for causal inference in observational studies
43. Li, X., K. Li, X. Shi, and W. Miao (2023b). Correction for nonignorable nonresponse bias in turnout estimation using callback data
44. He, P., Y. Li, X. Shi, and W. Miao (2023). Identification and estimation of causal effects with synthetic controls in the presence of interference

45. Ying, N., S. Luo, and W. Miao (2023). A generalized tetrad constraint for causal discovery with nonparametric models
46. Li, K., X. Li, X. Shi, and W. Miao (2023a). Nonresponse bias adjustment using callback data under a novel continuum of resistance model
47. Zhang, P., R. Wang, and W. Miao (2023). Causal attribution with confidence
48. Wang, R. and W. Miao (2024). Extreme-based causal effect learning with endogenous exposure and light-tailed error
49. Li, Y., L. Deng, Y. Wang, and W. Miao (2024). Randomized experiments for dyadic data

Presentations

1. Randomized experiments for dyadic data. The 8th Conference on High-Dimensional Statistics, Nanjing, April 2024.
2. Using callback data to correct nonresponse bias in turnout estimation in the US presidential election. Conference on Frontier of Statistics in Large Scale Data, Kunming, January, 2024.
Shandong University, April 2024.
Nankai University, May 2024.
Beijing Technology and Business University, June, 2024
3. Introducing a generalized tetrad constraint. Machine Learning and Statistics (ML&STAT) Conference, Shanghai, August 2023.
4. Introducing the specificity score: a measure of causality beyond P value.
The 12th National Conference on Probability and Statistics, 40 minutes plenary talk, Qingdao, April 2023.
Renmin University of China, April 2023.
Peking University, May 2023.
Southwestern University of Finance and Economics, May 2023.
The 7th Conference on High-Dimensional Statistics, Changsha, May 2023.
University of Pennsylvania, May 2023.
Capital of Statistics, June 2023.

Zhejiang University of Finance and Economics, June 2023.

Shanghai Jiaotong University, June 2023.

ICSA China Conference, Chengdu, July 2023.

China Joint Statistical and Data Science Conference (JSDCS), Beijing, July 2023.

The 9th International Forum on Statistics in Renmin University of China, July 2023.

Guangdong University of Technology, July 2023.

Poster at the 2023 NRC (Institute for Mathematical Statistics New Researchers Conference), Toronto, August 2023.

Hangzhou International Conference on Frontiers of Data Science, Hangzhou, August 2023.

The 2023 Pacific Causal Inference Conference, September 2023.

Department of Biostatistics, Epidemiology and Informatics, University of Pennsylvania, November 2023.

Department of Statistics and Data Science, National University of Singapore, April 2024.

5. Identification and Estimation of Causal Effects with Synthetic Controls in the Presence of Interference.

East China Normal University, March 2023,

American Causal Inference Conference, May 2023.

6. Paradoxes and resolutions for semiparametric fusion of individual and summary data.

16th International Conference on Computational and Financial Econometrics. King's College London, December 2022.

The 2022 Pacific Causal Inference Conference, September 2022.

Capital University of Economics and Business, October 2022

Northeast Normal University, November 2022

Fudan University, November 2022

Shanghai University of Finance and Economics, December 2022.

Zhejiang University, March 2023.

East China Normal University, April 2023.

University College of London, April 2023.

7. Proximal causal inference with application to the test-negative design studies of vaccine effectiveness.

Renmin University of China, November 2022.

Peking University Health Science Center, November 2022.

8. Proximal causal inference with application to synthetic control.
Xiamen University, October 2022.
Gouxionghui, March 2023
9. Auxiliary variables methods for missing data analysis under MNAR. Hubei University Of Economics, October 2022.
10. Confounding adjustment for causal inference in observational studies.
Wuhan University, September 2022.
Fudan University, December 2022.
11. Proximal inference for confounding adjustment and its application. SIGMAI seminar, August 2022.
12. A self-censoring model for multivariate nonignorable nonmonotone missing data.
Shanghai Jiaotong University, August 2022.
13. Paradoxes and solutions for semiparametric fusion learning with external summary statistics. Conference of Science and Machine Learning, Beijing, August 2022.
14. Semiparametric data fusion with external summary statistics. 5th International Conference on Econometrics and Statistics, Ryokoku University, June 2022.
15. A stableness of resistance model for nonresponse adjustment with callback data.
Emerging Challenges for Statistics and Data Sciences Workshop, Banff International Research Station, May 2022.
Statistics and Data Science Workshop, Xiamen University, April 2022.
16. Addressing selection and confounding bias in test-negative study designs for flu and COVID-19 monitoring. International Symposium on Probability Statistics and their Applications, Lanzhou University of Finance and Economics, August 2022.
17. Proximal inference for confounding adjustment. The 21st Forum on Statistical Science. Peking University, December 2021.
18. A stableness of resistance model for nonresponse adjustment with callback data.
IMS Workshop: Causal Inference with Big Data. National University of Singapore, December 2021;
The 2021 International Workshop on Statistical Theory and Related Fields. East China Normal University, December 2021.

19. Causal inference, observational studies, and the 2021 Nobel Prize in economics. Microsoft Research Asia, December 2021; Peking University, November 2021; Renmin University of China, October 2021; East China Normal University, October 2021; Beijing Academy of Artificial Intelligence, November 2021. Workshop on Causal Inference and Machine Learning, Chinese Academy of Science, April 2022.
20. The role of callback data in nonresponse adjustment. The Wharton School, October 2021.
21. Semiparametric inference for nonignorable nonresponse with paradata. The 2020 Pacific Causal Inference Conference, September 2021.
22. Proximal and Null Treatments Approaches for Confounding Adjustment. Carnegie Mellon University, July 2021.
23. An Introduction to Negative Control and Proximal Causal Learning. MRC Integrative Epidemiology Unit, University of Bristol, February 2021.
24. Identification of effects of multiple treatments in the presence of unmeasured confounding. The 2020 Pacific Causal Inference Conference, September 2020; Renmin University of China, October 2020; The Wharton School, February 2021; Capital Normal University, May 2021; Southwestern University of Finance and Economics, May 2021; Lorentz Center, Leiden University, December 2021; Mathematical Foundations for Artificial Intelligence Workshop, Tongji University, October 2021, CMStatistics, December 2021.
25. Auxiliary variable approaches for adjustment of confounding in causal inference. Huawei, August 2020.
26. Inference on effects of multiple causes with an unobserved confounder. Shanghai University of Finance and Economics, December 2019; Sun Yat-Sen University, December 2019.

27. A shadow variable approach for analysis of nonignorable missing data.
Nankai University, June 2019;
University of Hong Kong, July 2019;
Northeast Normal University, October 2019;
Xiamen University, November 2019.
28. Causal inference and missing data analysis methods. China Society for Industrial and Applied Mathematics, Foshan, September 2019.
29. Removing unmeasured confounding in air pollution studies with negative controls. International Chinese Statistical Association (ICSA) Applied Statistics Symposium, June 2018.
30. Alternatives to IV: Negative control, RUV, and synthetic control. 2018 International Conference on Data Science, Fudan University, December 2018.
31. A confounding bridge approach for double negative control inference of causal effects. Wharton School, May 2018.
32. Testing causative hypotheses in the presence of unmeasured confounding. Atlantic Causal Inference Conference (ACIC), University of North Carolina at Chapel Hill, May 2017.
33. Inference on Air Pollution Effects with Negative Controls. The 3rd Conference on High-dimensional Statistics, Xiamen University, April 2017.
34. Job talks: Negative control analysis and its application to air-pollution studies.
Peking University, January 2017
Tsinghua University, January 2017
The University of Hong Kong, March 2017
35. Identifying causal effects with negative controls.
10th International Chinese Statistical Association (ICSA) Conference, December 2016.
The 13th International Symposium on Econometric Theory and Applications (SETA), June 2017.
Atlantic Causal Inference Conference (ACIC), Carnegie Mellon University, May 2018.
36. Theory and implementation of doubly robust estimators with nonignorable missing data. Symposium on Statistics and Data Science for Young Scholars, Tsinghua University, December 2016.

37. Identification and inference of nonignorable missing covariate data. 3rd Taihu International Statistics Forum, July 2016.
38. Identifiability of normal and normal mixture models with nonignorable missing data. 20th Chinese Young Statisticians Conference, May 2016.
39. Restoration of causal effects with proxy variables of an unmeasured confounder. Harvard University, April 2016.
40. Identification and doubly robust estimation of data missing not at random. National Institute of Statistical Sciences Workshop on Data Not Missing at Random, November 2015.
41. Instrumental variable estimation of the marginal average effect of treatment on the treated. Eastern North Atlantic Region (ENAR) Meetings, March 2015.
42. Recent progress in the literature on direct and indirect effects. Center for Computational Systems Biology, Fudan University, December 2013.
43. Causal inference without ignorability. Jiangsu Normal University, November 2013.