Curriculum Vitae

Runze Li (October 7, 2025)

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Education

Ph.D. in Statistics, (1996-2000), Department of Statistics, University of North Carolina at Chapel Hill.

Ph.D. Dissertation: High-dimensional modeling via nonconcave penalized likelihood and local likelihood.

Advisers: Professors Jianqing Fan and James S. Marron.

M.S. in Statistics, (1990–1993), Academia Sinica, Beijing, China.

B.S. in Mathematics, (1986–1990), Beijing Normal University, Beijing, China.

Academic Experience

- 2018 present, Eberly Family Chair in Statistics, The Pennsylvania State University at University Park.
- 2016 present, Faculty Member of Penn State Cancer Institute, The Pennsylvania State University at Hershey.
- 2008 present, Professor, Department of Public Health Sciences, College of Medicine, The Pennsylvania State University at Hershey. (Courtesy Appointment)
- 2018 2023 Associate Head, Department of Statistics, The Pennsylvania State University at University Park.
- 2016 2023, Co-Director of Penn State Center for Statistical Genetics.
- 2001 2020, Faculty Member of the Methodology Center, The Pennsylvania State University at University Park.
- 2014 2018, Verne M. Willaman Professor of Statistics, The Pennsylvania State University at University Park.
- 2012-2014, Distinguished Professor of Statistics, The Pennsylvania State University at University Park.

- 2008 2012, Professor, Department of Statistics, The Pennsylvania State University at University Park.
- 2007 2012, Chair of statistical graduate study, Department of Statistics, The Pennsylvania State University at University Park. Also served Co-Chair for graduate study committee from 2016 to 2017.
- 2005 2008, Associate Professor, Department of Statistics, The Pennsylvania State University at University Park.
- 2000 2005, Assistant Professor, Department of Statistics, The Pennsylvania State University at University Park.
- 1993 1996, Research Assistant Professor, Institute of Applied Mathematics, Academia Sinica, Beijing.

Awards and Honors

- 2024 Carver Medal, Institute of Mathematical Statistics.
- 2023 Distinguished Mentoring Award, Eberly College of Science, Penn State University.
- 2023 IMS Medallion Lecturer at Joint Statistical Meetings, August 5-10, 2023 in Toronto
- Top scholar (top 0.5% of all scholars worldwide) by ScholarGPS in 2023, 2024.

https://scholargps.com/scholars/50376323903910/runze-li

World's top 2% scientists ranked by Stanford University in Years 2019 – 2025

(https://topresearcherslist.com/ or

https://elsevier.digitalcommonsdata.com/datasets/btchxktzyw/8)

- 2018 Faculty Research Recognition Awards for Outstanding Collaborative Research. College of Medicine, Penn State University.
- 2017 International Consortium Chinese Mathematicians best paper award.
- Elected Fellow, the American Association for the Advancement of Science, 2017.
- The Distinguished Achievement Award of International Chinese Statistical Association, 2017
- Highly Cited Researchers in Cross-Field (https://clarivate.com/highly-cited-researchers/) in Year 2022
- Highly Cited Researchers in Mathematics (https://clarivate.com/highly-cited-researchers/) in Years 2014 2020
- The Canadian Journal of Statistics Award 2016.

The United Nations' World Meteorological Organization (WMO) 2012 Gerbier-Mumm International Award. (See selection criterion for this award at http://www.wmo.int/pages/about/awards/guidelines_mumm_en.html)

Best paper award in Journal of Nonparametric Statistics 2012.

Elected Fellow, American Statistical Association

Elected Fellow, Institute of Mathematical Statistics

NSF Career Award, 2004.

American Statistical Association Biometrics Section Travel Award in recognition of an excellent contributed paper at JSM 2002.

Hoeffding Fellowship at UNC-CH, 1997.

Merit Teaching Assistantship at UNC-CH (1996-1997).

The President's Scholarship of Chinese Academy of Sciences, 1993.

Distinguished Professional Services

A. Editorial board services:

Co-editor of Journal of American Statistical Association, 2026—2029.

Co-Editor of Annals of Statistics for 2013—2015.

Associate Editor of Annals of Statistics: 2007—2012

Associate Editor of Journal of American Statistical Association: 2006—present

Associate Editor of Annals of Mathematical Sciences and Applications: 2015—present

Editorial board member of Science China: Mathematics: 2018—present

Associate Editor of Journal of Multivariate Analysis: 2019—present

Associate Editor of Electronic Journal of Statistics: 2022—present

Guest Co-Editor of Science China: Mathematics (Chinese Version), Volume 50, Issue 5, 2020

Associate Editor of Statistica Sinica: 2005—2012

B. Organization of professional conferences:

Associate Chair for Machine Learning and AI, Scientific Program Committee for the 2nd China Joint Statistical and Data Science Meetings (CJSM) July 12-14, 2024, Kunming, P.R. China.

Scientific Program Committee of the Inaugural China Joint Statistical and Data Science Meetings (CJSM) July 10-13, 2023, Beijing, P.R. China.

- Chair of Scientific Program Committee of International Conference on Big Data and Statistical Interdisciplinary Sciences, July 4 6, 2023, East China Normal University, Shanghai, P.R. China.
- Chair of Scientific Program Committee of Statistical Foundations of Data Science and Their Application. May 8 10, 2023, Princeton University, USA.
- Vice Chair of scientific program committee of Bernoulli Society's World Probability and Statistics Congress, August 2020 Seoul, Korea.
- Scientific program committee member for the 2019 International Conference on Data Science, December 13 - 15, 2019, Fudan University, Shanghai, P. R. China.
- Scientific program committee member for the 2018 International Chinese Statistical Association (ICSA-China) conference, July 2 5, 2018, Qingdao, P. R. China
- Scientific program committee member for the Nankai Alumni Statistics Forum, July 6 8, 2015, Tianjin, P. R. China
- Scientific program committee member for the 10th Frontier Statistics, June 24 26, 2015, Beijing, P. R. China
- Scientific program committee member for the 1st International Conference on Big Data and Applied Statistics, Beijing, P.R. China, 2014.
- Chair of scientific program committee for the 4th IMS China, July 1 4, 2013, Chengdu, China.
- Member of scientific program committee for The Second Taihu Lake (Su Zhou) International Statistics Forum, July 6-8, 2013, Suzhou, China.
- Co-chair of scientific program committee for the second IMS Asia Pacific Rim meeting in 2012, Tokyo, Japan.
- Member of scientific program committee of ICSA 2011 Applied Statistics Symposium. New York City, NY.
- Co-chair of scientific program committee for the first IMS Asia Pacific Rim meeting in 2009, Seoul, Korea
- ASA Biometrics Section program chair for JSM 2007, August 2007, Salt Lake City, Utah
- IMS program chair for ENAR05, Austin, Texas.

C. Service to professional organizations:

- Chair of Publication Committee, The International Chinese Statistical Association, 2023, 2024, 2025.
- Chair-elect, Chair and Past-Chair of ASA Nonparametric Statistics Section, 2019-2021.
- Member of IMS Committee to Select Editors, 2020.

Member of publication committee, IMS, 2013-2015.

Member of committee on special lectures, IMS, 2012 - 2014.

Co-Chair for the Committee on Asia Pacific Rim Meeting of Institute of Mathematical Statistics (September 2007- August 2012)

Member of committee on federally funded research of American Statistical Association, 2010-2012.

Directors of International Chinese Statistical Association (ICSA) Board, 2007-2009

ASA Biometrics Section executive committee member, 2006 - 2008

Grant Support

- Collaborative Research: NSF-SNSF: Tail-robust Analysis of High-dimensional Nonstationary Time Series. National Science Foundation, DMS 2514400, Sole Principal Investigator, 09/01/2025 - 08/31/2028. Total: \$175,000.
- 2. DMS/NIGMS 2: Novel Statistical Methods, Algorithms, and Pipelines for Learning Omics Data with Complex Heterogeneity (NIH R01GM163244, PI Wen Zhou). Subcontract from New York University. Sole Principal Investigator. 07/2025-06/2029 Amount: \$338,484
- 3. Wells Fargo Gift fund. Sole Principal Investigator, 07/01/2024 . Amount: \$50,000.
- Leveraging Big Data Science to Focus the HIV Response in Countries with Generalized HIV Epidemics. (NIH R01AI170249, PI: Stefan D. Baral). Subcontract from Johns Hopkins University, Co-investigator (Subcontract PI: Le Bao). 07/2022-06/2026. Amount: \$822,756.
- 5. Cross-Disciplinary Neural Engineering (CDNE) Training Program. 1T32NS115667-01A1, Senior personnel, (PI: Bruce J. Gluckman). 07/2021 06/2026. Amount: \$1,262,805.
- 6. Methodology and measurement for examining short-term and long-term effects of e-cigarette and polysubstance use (NIH R01DA049154 PI: Anne Buu) Subcontract from University of Texas Health Science Center. **Sole Principal Investigator** of this subcontract. 7/1/2020-6/30/2024. Amount: ≈\$170,000.
- 7. Estimating causes of death in high data quality settings: a Bayesin hierarchical model approach, World Health Organization, co-investigator (PI: Le Bao), 11/01/2023 12/31/2023. Amount: \$30,000.
- 8. Statistical Models for Estimating and Projecting HIV/AIDS Epidemics, National Institute of Health, R01AI136664. Co-Investigator for 09/2021-08/2023, (PI: Le Bao), 09/2017-08/2023. Amount: \$3,585,943.
- 9. Collaborative Research: High-Dimensional Decision Making and Inference with Applications for Personalized Medicine. National Science Foundation, DMS 2015539, co-PI (PI: Ethan X. Fang). 06/15/2020 05/31/2023. Total: \$160,000.

- 10. Collaborative Research: Algorithms for Optimal Adaptive Enrichment Design in Randomized Trial. National Science Foundation, DMS 1953196, co-PI (PI: Ethan X. Fang). 06/01/2020 05/31/2023. Total: \$200,000.
- Optimization and Statistical Procedures for Big Data and Applications. National Science Foundation, DMS 1820702, PI (Co-PI: Tao Yao, Ethan X. Fang and Xuemei Huang). 07/01/2018 6/30/2023 (with two year no cost extension). Total: \$350,000.
- 12. Stressors under food insecurity and short-term cognitive change in rural older adults. Penn State Social Science Research Institute internal seed grant, co-I (PI: Muzi Na). 05/01/2021 04/30/2023. Total: \$40,744.
- 13. Developing Methodology to examine causal mediation of time-varying effects in smoking cessation treatments. (NIH R01CA229542 PI: Donna Coffman). Subcontract from Temple University. **Sole Principal Investigator** of this subcontract. 8/1/2018 7/31/2022. Amount: \$329,424.
- 14. Manganese-related neurotoxicity in asymptomatic welders. National Institute of Environmental Health Sciences. R01 ES019672. Co-investigator (PI: Xuemei Huang). 03/01/2017 02/28/2022. Amount: \$3,828,128.
- 15. The moderating role of smoking exposure in the relationship between the nicotinic acetylcholine receptor gen cluster and nicotine dependence. R21CA226300, co-I (PI: Helen Kamens). \$238,888. 2/15/2020 1/31/2023 (with one-year no cost extension)
- 16. Southeast Asia Malaria Research Center 2017-2024, National Institute of Allergy and Infectious Diseases U19AI089672, Co-I (PI: Liwang Cui), 04/01/2017 3/31/2024. Total: \$9,353,113 with total direct cost: \$7,576,626.
- 17. Penn State Biomedical Big Data to Knowledge (B2D2K) Training Program. National Institutes of Health, National Library of Medicine, T32 LM012415. PI (with PIs Vasant G. Honavar and Marylyn, D. Ritchie (contact PI)). 4/1/2016 3/31/2021. Total \$1,339,139.
- 18. Center for Complex Data To Knowledge in Drug Abuse and HIV Behavioral Science. National Institute on Drug Abuse, NIH, P50 DA039838, Co-Investigator (PI: Linda M. Collins). 08/01/2015 07/31/2022 (with two-year no cost extension). Approx Total: \$13 million. My role in this center grant is given below.
 - (a) New Statistical Procedures for High-Dimensional Complex Drug Abuse Data. **Principal Investigator**. 08/01/2015 07/31/2020. Approx Total: \$2.9 million
 - (b) Innovative Methods for Constructing Just-in-Time Adaptive Interventions. Co-Investigator (PI: Susan Murphy). 08/01/2015 07/31/2020. Approx Total: \$2.9 million
 - (c) Multidimensional and Dynamic Moderation in Drug Abuse and HIV Studies. Co-Investigator (PI: Stephanie Lanza). 08/01/2015 - 07/31/2020. Approx Total: \$2.5 million
 - (d) Pilot Core. Co-Investigator (PI: Stephanie Lanza). 08/01/2015 07/31/2020. Approx Total: \$1.5 million

- 19. Diet and stress responses in low-income rural adults under the dynamics of food insecurity, CTSI pilot project, Co-Investigator (PI: Muzi Na), 9/1/2018-8/31/2019. Amount: \$50,000 for Direct cost.
- Collaborative Research: High-Dimensional Projection Tests and Related Topics. National Science Foundation. DMS 1512422, Sole Principal Investigator. 7/1/2015 - 5/31/2019. Total: \$123,315.
- 21. Statistical Learning and Inference for Ultrahigh Dimensional Data. National Nature Science Foundation of China, 11690015, Co-I for 1/1/2017 12/31/2018 (PI: Changliang Zou at Nankai University, China). Total direct cost: RMB 1.0million.
- 22. Distributed Statistical inference and test of spurious correlation for big data. National Nature Science Foundation of China, 11690014, Co-I for 1/1/2017 12/31/2018 (PI: Min Chen at Academy of Mathematics and System Science, Chinese Academy of Sciences). Total direct cost: RMB1.3million.
- 23. Measurement and Methodology for Daily Patterns of Drug Use and Related Behaviors. (NIH R01 PI: Anne Buu). Subcontract from University of Michigan. **Sole Principal Investigator** of this subcontract. 7/1/2013 3/31/2018. Amount: \$286,201.
- 24. Age-Varying Effects in the Epidemiology of Drug Abuse, National Institute on Drug Abuse, NIH, R01 DA039854, Co-Investigator (PI: Stephanie Lanza), 07/01/2015 05/31/2019. Total: \$678,150.
- 25. Pennsylvania State University Tobacco Center of Regulatory Science (TCORS). National Institute on Drug Abuse, NIH, P50 DA036107, Co-Investigator (PI: Joshua E. Muscat) for this NIH center grant, Co-Investigator for both Biostatistics Core and Research Training and Educational Component. 9/1/2013 8/31/2018. Total: \$3,927,729 for Year 1, \$3,866,600 for Year 2, \$3,869,769 for Year 3, \$3,798,376 for Year 4, and \$3,679,212 for Year 5.
- 26. Center for Prevention and Treatment Methodology, National Institute on Drug Abuse, NIH, P50-DA10075, Co-Investigator (PI: Linda M. Collins). 9/1/2010 8/31/2016. Approx Total: \$10,124,708. My role in this center grant is given below.
 - (a) New models for joint analysis of intensive longitudinal data and survival data. National Institute on Drug Abuse, NIH, P50-DA10075(5929), **Principal Investigator**. 9/1/2010 8/31/2015. Total: \$1,254,309.
 - (b) Smart methodology for constructing adaptive interventions. National Institute on Drug Abuse, NIH, P50-DA10075(5930), Co-Investigator (PI: Susan A Murphy). 9/1/2010 8/31/2015. Total: \$2,577,822.
 - (c) Advances in finite mixture modeling for substance use and HIV research. National Institute on Drug Abuse, NIH, P50-DA10075(5926), Co-Investigator (PI: Stephanie T. Lanza). 9/1/2010 8/31/2015. Total: \$1,120,133.
 - (d) Administrative core. National Institute on Drug Abuse, NIH, P50-DA10075(5913), Co-Investigator (PI: Linda M. Collins). 9/1/2010 8/31/2015. Total: \$2,778,920.

- (e) Software core. National Institute on Drug Abuse, NIH, P50-DA10075(5920), Co-Investigator (PI: Stephanie T. Lanza). 9/1/2010 8/31/2015. Total: \$1,716,259.
- 27. Folded concave penalized learning for Parkinson's biomarkers identification. Grace Woodward Collaborative Engineering/Medicine Research Grant. The Pennsylvania State University, Co-PI (PI: Tao Yao, Co-PI: Xuemei Huang). 7/1/2014 6/30/2016. Total: \$50,000.
- 28. Advancing Tobacco Research by Integrating Systems Science and Mixture models. National Cancer Institute, NIH, R01 CA168676, Co-I (PI: Stephanie Lanza). 9/1/2012 8/31/2015. Total: \$497,694.
- 29. Do Access Barriers to Autism Care Persist Despite Autism Insurance Mandate? NIH, R01 MH096711. Co-I (PI: Li Wang). 9/12/2012 7/31/2016. Total: \$815,762.
- 30. New Statistical Methodology to Establish Construct Validity for Childhood Risk (NIH K01 PI: Anne Buu). Subcontract from University of Michigan. **Sole Principal Investigator** of this subcontract. 7/1/2010 3/31/2014. Amount: \$90,196.
- 31. New Directions in Statistical Robust Modeling and their Application. National Natural Science Foundation of China, 11028103, co-I (PI: Hengjian Cui). 1/1/2011 12/31/2012. Amount: RMB 200,000.
- 32. Joint Modeling of the Effects of Substance Use on Changes in CD4 and on Survival Time of Women with HIV. NIH supplemental fund from WIHS through SUNY Upstate Medical University. Co-I (PI: Stephanie Lanza). 04/01/2012 12/31/2012. Total: \$70,459.
- 33. Southeast Asia Malaria Research Center, National Institute of Allergy and Infectious Diseases, NIH, U19AI089672, Co-Investigator from 7/1/2011-6/30/2012. (PI: Liwang Cui, 7/1/2010 6/30/2017). Amount: \approx \$14.5 million.
- 34. US-China supplement of DMS 0348869 "CAREER: Model Selection for Semiparametric Regression Models in High Dimensional Modeling and its Oracle Properties". National Science Foundation, DMS 0926187, Sole Principal Investigator, 2009-2011. Amount: \$40,000.
- 35. The First Institute of Mathematical Statistics Asia Pacific Rim Meetings. National Science Foundation, DMS 0855596. **Sole Principal Investigator**. 4/1/2009 3/31/2010. Total: \$8,000.
- NIH Roadmap: New Statistical Models for Intensive Longitudinal Data. National Institute on Drug Abuse, NIH, R21 DA024260. Principal Investigator, (Co-PI, Lisa Dierker) 2007 - 2012. Total: \$1,187,474.
- 37. NIH Roadmap: Dynamical systems and related engineering approaches to improving behavioral interventions. National Institute on Drug Abuse, NIH, 1 R21 DA024266. Coinvestigator, (PI, Linda M. Collins and Daniel Rivera). 2007 2012. Total: \$1,133,344.
- 38. Scientific Computing Research Environments for the Mathematical Sciences (SCREMS). National Science Foundation, DMS 0722351, Co-PI (PI: Murali Haran, Co-PI: G. Babu, J. Li, R. Li and B. Lindsay). 2007-2008. Amount: \$50,000.

- 39. Center for Prevention and Treatment Methodology, National Institute on Drug Abuse, NIH, P50-DA10075, Co-Investigator (PI: Linda M. Collins). 9/1/2005 8/31/2010. Total: \$7,891,389. My role in this center grant is given below.
 - (a) Semi-varying coefficient models for intensive longitudinal data. National Institute on Drug Abuse, NIH, P50-DA10075(0008), **Principal Investigator**. 9/1/2005 8/31/2010. Total: \$933,356.
 - (b) Optimizing behavioral interventions for drug abuse prevention and treatment National Institute on Drug Abuse, NIH, P50-DA10075(0009), Co-Investigator, (PI: Linda M. Collins). 9/1/2005 8/31/2010. Total: \$661,427.
- CAMLET: A Combined Ab-initio Manifold Learning Toolbox for Nanostructure Simulations, National Science Foundation, CCF 0430349, Co-PI (PI: Hongyuan Zha) for 2004-2006, and Principal Investigator for 2006-2008. 2004-2008. \$215,000.
- 41. CAREER: Model Selection for Semiparametric Regression Models in High Dimensional Modeling and its Oracle Properties. National Science Foundation, DMS 0348869, **Sole Principal Investigator**. 2004-2009. Amount: \$400,000.
- 42. Scientific Computing Research Environments for the Mathematical Sciences (SCREMS). National Science Foundation, DMS 0322673, Co-PI (PI: Steve Rathbun, Co-PI: G. Babu, J. Li, R. Li and B. Lindsay). 2003-2004. Amount: \$65,347.
- 43. Center for Prevention Methodology, National Institute on Drug Abuse, NIH, P50-DA10075, Co-Investigator, (PI: Linda M. Collins). 2001-2005. Total: \$4,864,630.
- 44. Variable Selection in High-dimensional Modeling and its Oracle Properties. National Science Foundation, DMS 0102505, **Sole Principal Investigator**. 2001-2005. Amount: \$96,769.

Fields of Research

Statistical inference for high-dimensional data

Feature screening for ultrahigh-dimensional data

Model selection for high-dimensional data

Functional/longitudinal data analysis

Nonparametric smoothing method

Design and modeling for computer experiments

Statistics applications in behavior science research and engineering research.

Analysis of longitudinal genetic data

Analysis of brain images

Book:

- Fang, K.-T., Li, R. and Sudjianto, A. (2006). Design and Modeling for Computer Experiments. Chapman and Hall/CRC. Boca Raton, FL.
- Fan, J., Li, R., Zhang, C.H. and Zou, H. (2020). Statistical Foundations of Data Science. Chapman and Hall/CRC. Boca Raton, FL.

Publication

Authors with * stands for that the authors were my trainee during the completion of the works Authors with \dagger stands for that the authors were my co-author's trainee during work completion

A. Technical Reports and manuscripts submitted for publication in refereed journals

- 1. Yang, S., Zhao, D. and Li, R. (2025). Statistical inference for high-dimensional partially linear models via debiased rank lasso. Revised for *Journal of Machine Learning and Research*.
- 2. Hu, J., Tong, J., Ning, Y., Tang, C. Y., Moore, J., Li, R. and Chen, Y. (2025). Federated feature selection with false discovery rate control. Revised for *Journal of Royal Statistical Society, Series B*.
- 3. He, Z., Sun, Y., Liu, J. and Li, R. (2025). High-dimensional parameter transfer with fused-regularizer. Revised for *Journal of Machine Learning and Research*.
- 4. Jiang, Y., Yang, S., Bao, L. and Li, R. (2024). Simultaneous feature- and sample-splitting ADMM for penalized rank regression. Revise for *Journal of Computational and Graphical Statistics*.
- 5. Chen, Z., Li, R. and Xu, Y. (2025). Distributed nonparametric regression with heterogeneity through prediction-based aggregation. Revised for *Journal of Computational and Graphical Statistics*.
- 6. Xu, K., Zhou, Y., Zhu, L. and Li, R. (2025). Test of multivariate independence via comparing two bivariate means. Revised for *Journal of American Statistical Association*.
- 7. Jiang, S., Li, R., Ma, S. and Zhang, Z. (2025). Causal inference on quantile dose-response functions via local ReLU least squares weighting. Revised for *Annals of Statistics*.
- 8. Cai, Z., Ding, T., Li, R. and Zhang, Y. (2025). High-dimensional independence test via the generalized HSIC. Submitted for publication.
- 9. Zhang, X., Tan, X., Li, R. and Liu, X. (2024). Hypothesis testing in high-dimensional censored-transformation models. Submitted for publication.
- 10. Xu, H., Ke, Y., Guerrier, S. and Li, R. (2022). Nonasymptotic theories for tail-robust auto-covariance matrix estimation methods. Submitted for Publication.
- 11. Lan, W., Feng, L., Li, R. and Tsai, C.-L. (2024). Maximum-of-Differences test for comparing multivariate K-sample distributions. Submitted for Publication.

- 12. Ding, Y., Li, R. and Xue, Li. (2025). Statistical Convergence Rates of Optimal Transport Map Estimation between General Distributions. Submitted for publication.
- 13. Tong, Z. and Li, R. (2025). Winsorized Rank-Based Regression in High Dimensions. Submitted for publication.

B. Publication in Refereed Journals

- Zhang, Z., Yu, X. and Li, R. (2025). A novel approach of high dimensional linear hypothesis testing problem. *Journal of American Statistical Association*. https://doi.org/10.1080/01621459.2024.2428467
- Yang, W., Liu, D., Le, B. and Li, R. (2025). A likelihood approach to incorporating self-report data in HIV recency classification. *Biometrics*. In press. https://doi.org/10.1093/biomtc/ujae147
- 3. Cai, Z., Zhang, Y., Guo, X., Zhu, L. and Li, R. (2025). A nonparametric independence test via penalized mutual information. *Science China Mathematics*. https://doi.org/10.1007/s11425-024-2486-1.
- Liu, J., Liao, Y. and Li, R. (2025). Generalized varying coefficient mediation models. Communications in Mathematics and Statistics. In press. https://doi.org/10.1007/s40304-023-00366-2.
- 5. Zou, T., Lan, W., Li, R. and Tsai, C.-L. (2025). Fixed and random covariance regression analyses. *Annals of Statistics.* **53**, 1587–1612.
- Li, R., Li, W. and Wang, Q. (2025). Tests for shape matrices in moderate dimension via Tyler's M estimators. *Journal of American Statistical Association*. 120, 472 - 485. https://doi.org/10.1080/01621459.2024.2350573
- Guo, X., Li, R., Zhang, Z. and Zou, C. (2025). Model-free statistical inference on high-dimensional data. *Journal of American Statistical Association*. 120, 186 197 (NIHMSID: NIHMS1978198) DOI:10.1080/01621459.2024.2310314.
- 8. Wen, J., Yang, S., Wang, D., Jiang*, Y. and Li, R. (2025). Feature-splitting algorithms for ultrahigh dimensional quantile regression. *Journal of Econometrics*. **249**, 105426 (PMCID: PMC12326526). https://doi.org/10.1016/j.jeconom.2023.01.028
- 9. Jiang, D., Hou, Z., Bai, Z. and Li, R. (2025). Invariance Principle and CLT for the Spiked Eigenvalues of Large-dimensional Fisher Matrices and Applications. *Statistica Sinica.* **35**, 2325-2357. DOI: 10.5705/ss.202022.0377
- Zhang, Q., Yi, C.Destouni, G., Wohlfahrt, G., Kuzyakov, Y. Li, R., Kutter, E., Chen, D., Rietkerk, M. Tian, Z. Hendrey, G., Fang, W., Krakauer, N., Jarsjo, J., Han, J. and Xu, S. (2025). How Michaelis-Menten kinetics can represent ecosystem-scale respiration: scale and applicability. *Environmental Research Letters*. 20 041003 https://doi.org/10.1088/1748-9326/adc31a

- 11. Yang, S., Zheng, S. and Li, R. (2024). A new test for high dimensional two-sample mean problems with consideration of correlation structure. *Annals of Statistics*. **52**, 2217-2240. https://doi.org/10.1214/24-AOS2433
- Zhao, A. Y., Li, C., Li, R. and Zhang, Z. (2024). Testing high-dimensional regression coefficients in linear models. Annals of Statistics. 52, 2034-2058. https://doi.org/10.1214/24-AOS2420
- Li, D., Li, R. and Shang, H. L. (2024). Detection and estimation of structural breaks in highdimensional functional time series. Annals of Statistics. 52, 1716 - 1740. https://doi.org/10.1214/24-AOS2414
- Zhou, Y., Xu, K., Zhu, L. and Li, R. (2024). Rank-based indices for testing independence between two high-dimensional vectors. *Annals of Statistics*. 52, 184-206. DOI: 10.1214/23-AOS2339 (PMCID: PMC11064990)
- 15. Wang*, J., Cai, X., Niu, X. and Li, R. (2024). Variable selection for high-dimensional nodal attributes in social networks with degree heterogeneity. *Journal of American Statistical Association*. **119**, 1322-1335. (NIHMSID: NIHMS1885385). DOI:10.1080/01621459.2023.2187815
- Liu, W., Yu, X., Zhong, W. and Li, R. (2024). Projection test for mean vector in high dimensions. Journal of American Statistical Association. 119, 744 756. (PMCID: PMC11064993). DOI: 10.1080/01621459.2022.2142592.
- Chen, Y., Wang, Y., Fang, E.X., Wang, Z. and Li, R. (2024). Nearly dimension-independent sparse linear bandit over small action spaces via best subset selection. *Journal of American Statistical Association*. 119, 246 258.
 DOI: 10.1080/01621459.2022.2108816.
- Guo, X., Li, R., Liu, J. and Zeng*, M. (2024). Estimations and tests for generalized mediation models with high-dimensional potential mediators. *Journal of Business and Economic Statistics*. 42, 243-256. (NIHMSID: NIHMS1760197). https://doi.org/10.1080/07350015.2023.2174548
- 19. Yang, X., Chen, J., Li, D. and Li, R. (2024). Functional-coefficient quantile regression for panel data with latent group structure. *Journal of Business & Economic Statistics*. **42**(3), 1026-1040. (PMCID: PMC11250162) https://doi.org/10.1080/07350015.2023.2277172
- 20. Zhang, Q., Yi, C., Destouni, G., Wohlfahrt, G, Kuzyakov, Y., Li, R., Kutter, E. Chen, D., Rietkerk, M., Manzoni, S., Tian, Z., Hendrey, G., Fang, W., Krakauer, N., Hugelius, G., Jarsjo, J., Han, J., and Xu, S. (2024). Water limitation regulates positive feedback of increased ecosystem respiration. *Nature Ecology & Evolution*. 8, 1870 1876. https://doi.org/10.1038/s41559-024-02501-w
- Wu, P., Han, S., Tong, X. and Li, R. (2024). Propensity score regression for causal inference with treatment heterogeneity. Statistica Sinica. 34, 747-769. https://doi.org/10.5705/ss.202022.0008

- 22. Lewis, M. M., Mailman, R. R., Cheng, X. V., Du, G., Zhang, L., Li, C., De Jesus, S., Tabbal, S.D., Li, R. and Huang, X. (2024). Clinical progression of Parkinson's disease in the early 21st century: Insights from the accelerating medicine partnership (AMP-PD) data. *Parkinsonism and Related Disorders*, 130, 107186.
- Cattaneo, M.D., Fan, Y., Li, R. and Song, R. (2024). Data science in economics and finance: Introduction. *Journal of Econometrics*, 239. 105627 https://doi.org/10.1016/j.jeconom.2023.105627
- 24. Li, R., Mu, J., Yang, S., Ye, C. and Zhan, X. (2024). Compositional variable selection in quantile regression for microbiome data with false discovery rate control. *Statistical Analysis and Data Mining: The ASA Data Science Journal.* 17(2), e11674 DOI: 10.1002/sam.11674
- Tong*, Z, Cai*, Z., Yang, S. and Li, R. (2023). Model-free conditional feature screening with FDR control. *Journal of American Statistical Association*. 118, 2575-2587.
 DOI: 10.1080/01621459.2022.2063130
- Yu*, X., Li*, D., Xue, L. and Li, R. (2023). Power-enhanced simultaneous test of high-dimensional mean vectors and covariance matrices with application to gene-set testing. *Journal of American Statistical Association*. 118, 2548-2561.
 DOI: 10.1080/01621459.2022.2061354
- 27. Li, R., Xu, K., Zhou, Y. and Zhu, L. (2023). Test the effects of high-dimensional covariates via aggregating cumulative covariances. *Journal of American Statistical Association*. **118**, 2184 2194. https://doi.org/10.1080/01621459.2022.2044334
- Guo, X., Ren*, H., Zou, C. and Li, R. (2023). Threshold selection for feature screening via error rate control. *Journal of American Statistical Association*. 118, 1773-1785. https://doi.org/10.1080/01621459.2021.2011735
- 29. Zhong, W., Qian, C., Liu, W., Zhu, L. and Li, R. (2023). Feature screening for interval-valued response with application to study association between posted salary and required skills. *Journal of American Statistical Association*. **118**, 805 817. (PMCID: PMC10338024) DOI: 10.1080/01621459.2022.2152342.
- 30. Sheng[†], B., Li*, C., Bao, L. and Li, R. (2023). Probabilistic HIV recency classification a logistic regression without labelled individual level training data. *Annals of Applied Statistics*. **17**, 108-129. (PMCID: PMC10577400).
- 31. Guo, X, Li, R, Liu, J. and Zeng*, M. (2023). Statistical Inference for Linear Mediation Models with High-dimensional Mediators and Application to Studying Stock Reaction to COVID-19 Pandemic. *Journal of Econometrics*. **235**, 166-179. https://doi.org/10.1016/j.jeconom.2022.03.001
- 32. Li*, C., Li, R., Wen*, J., Yang, S. and Zhan, X. (2023). Regularized linear programming discriminant rule with folded concave penalty for ultrahigh-dimensional data. *Journal of Computational and Graphical Statistics*. **32**, 1074 1082. https://doi.org/10.1080/10618600.2022.2143785

- 33. Nam, J. K., Piper, M. E., Tong, Z., Li, R., Yang, J. J., Jorenby, D.E., and Buu, A. (2023) Dependence motives and use contexts that predicted smoking cessation and vaping cessation: a two-year longitudinal study with 13 waves, *Drug and Alcohol Dependence*, **250**, **110871**, doi.org/10.1016/j.drugalcdep.2023.110871.
- 34. Buu, A., Tong, Z., Cai, Z., Li, R., Yang, J.J., Jorenby, D.E., and Piper, M.E. (2023). Subtypes of dual users of combustible and electronic cigarettes: longitudinal changes in product use and dependence symptomatology. *Nicotine & Tobacco Research.* **25**, 438-443. https://doi.org/10.1093/ntr/ntac151.
- 35. Coffman, D.L., Dziak, J.J., Litson, K., Chakraborti, Y., Piper, M.E., and Li, R. (2022). A causal approach to functional mediation analysis with application to a smoking cessation intervention. *Multivariate Behaviorial Research.* **58**, 859-876 https://doi.org/10.1080/00273171.2022.2149449
- 36. Bao, L, Li*, C., Li, R. and Yang, S. (2022). Causal structural learning on MPHIA individual dataset. *Journal of American Statistical Association*. **117**, 1642-1655. (PMCID: PMC9817037) DOI: 10.1080/01621459.2022.2077209.
- 37. Li*, C. and Li, R. (2022). Linear hypothesis testing in linear models with high dimensional responses. *Journal of American Statistical Association*. **117**, 1738-1750. https://doi.org/10.1080/01621459.2021.1884561
- 38. Guo, X., Li, R., Liu, J. and Zeng*, M. (2022). High-dimensional mediation analysis for selecting DNA methylation Loci mediating childhood trauma and cortisol stress reactivity. *Journal of American Statistical Association.* **117**, 1110-1121. https://doi.org/10.1080/01621459.2022.2053136
- Nandy[†], D., Chiaromonte, F. and Li, R. (2022). Covariate information number for feature screening in ultrahigh-dimensional supervised problems. *Journal of American Statistical Association*. 117, 1516 1529. https://doi.org/10.1080/01621459.2020.1864380
- 40. Ren, H., Zou, C., Chen, N. and Li, R. (2022). Large-scale datastreams surveillance via pattern-oriented-sampling. *Journal of American Statistical Association*. **117**, 794-808. https://doi.org/10.1080/01621459.2020.1819295
- 41. Liu*, W., Ke*, Y., Liu, J. and Li, R. (2022). Model-free feature screening and FDR control with knockoff features. *Journal of American Statistical Association*. **117(537)**, 428-443. https://doi.org/10.1080/01621459.2020.1783274
- 42. Zou, T, Lan, W, Li, R. and Tsai, C.-L. (2022). Inference on Covariance-Mean Regression. Journal of Econometrics. 230, 318 - 338. https://doi.org/10.1016/j.jeconom.2021.05.004
- 43. Liu, W., Yu*, X. and Li, R. (2022). Multiple-splitting project test for high dimensional mean vectors. *Journal of Machine Learning and Research*. **23(71)**:1-27. https://www.jmlr.org/papers/v23/20-1103.html

- 44. Cai*, Z., Li, R. and Zhang, Y. (2022). A distribution free conditional independence test with applications to causal discovery. *Journal of Machine Learning and Research*. **23(85)**:1-41. https://jmlr.org/papers/v23/20-682.html
- 45. Chen[†], C., Wang, M., Wu, R. and Li, R. (2022). A robust information criterion for model selection based on empirical likelihood. *Statistica Sinica*. **32**, 1205 1223. doi:10.5705/ss.202020.0254
- 46. Liao*, Y., Liu, J., Coffman, D. L. and Li, R. (2022). Varying coefficient mediation model. Journal of Business and Economics Statistics, 40, 1759-1771. (PMCID: PMC9624463) https://doi.org/10.1080/07350015.2021.1971089
- 47. Cai, X, Coffman, D., Pipe, M. and Li, R. (2022). Estimation and inference for the mediation Effect in a time-varying mediation model. *BMC Medical Research Methodology*. **22**:113. 10.1186/s12874-022-01585-x
- 48. Huang, Y., Li*, C., Li, R. and Yang, S. (2022). An overview of tests on high-dimensional means. *Journal of Multivariate Analysis*. **188**, 104813. https://doi.org/10.1016/j.jmva.2021.104813
- 49. Guo, X., Liu*, W., Li, R. and Zhu, L. (2022). Stable correlation and robust feature screening. Science China Mathematics. 65, 153-168. https://doi.org/10.1007/s11425-019-1702-5
- 50. Zeng*, M., Liao*, Y., Li, R. and Sudjianto, A. (2022). Local linear approximation algorithm for neural network. *Mathematics*, **10**, 494. https://doi.org/10.3390/math10030494
- 51. Chen[†], H., Zou, C. and Li, R. (2022). Projection-based high-dimensional sign test. *Acta Mathematica Sinica*, *English Series*. **38**, 683 708. https://doi.org/10.1007/s10114-022-0435-9
- 52. Cai, Z., Xi, D., Zhu, X. and Li, R. (2022). Causal discoveries for high dimensional mixed data. Statistics in Medicine. 41, 4924-4940. doi:10.1002/sim.9544
- 53. Rincon, S. J., Dou[†], N., Murray-Kolb, L. E., Hudy, K. A., Mitchell, D. C., Li, R. and Na, M. (2022). Daily food insecurity is associated with diet quality, but not energy intake, in winter and during COVID-19, among low-income adults. *Nutrition Journal*. 21:19 https://doi.org/10.1186/s12937-022-00768-y
- 54. Na, M., Dou[†], N., Liao, Y, Rincon, S. J., Francis, L. A., Graham-Engeland, J. E., Murray-Kolb, L. E. and Li, R (2022). Daily food insecurity predicts lower positive and higher negative affect: An ecological momentary assessment study. *Frontiers in Nutrition*. https://doi.org/10.3389/fnut.2022.790519
- 55. Yang, J. J., Lin, H.-C., Ou, T.-S., Tong, Z., Li, R., Piper, M., Buu, A. (2022). The situational contexts and subjective effects of co-use of electronic cigarettes and alcohol among college students: an ecological momentary assessment (EMA) study. *Drug and Alcohol Dependence*. 239, 109594. https://doi.org/10.1016/j.drugalcdep.2022.109594

- 56. Brown, G., Du, G., Farace, E., Lewis, M. M., Eslinger, P. J., McInerney, J., Kong, L., Li, R., Huang, X., and De Jesus, S., (2022). Subcortical iron accumulation pattern may predict neuropsychological outcomes after STN 3 DBS: a pilot study. *Journal of Parkinson's Disease*. https://doi.org/10.3233/JPD-212833
- 57. Ren*, H., Zou, C. and Li, R. (2022). Extrapolation-based tuning parameters selection in massive data analysis (in Chinese). *Science China Math.* **52**, 689-708. doi: 10.1360/SCM-2020-0622
- 58. Shi[†], C., Song, R., Lu, W. and Li, R. (2021). Statistical inference for high-dimensional models via recursive online-score estimation. *Journal of American Statistical Association*. **116**, 1307 1318. (PMCID: PMC8290873).
- Li*, Z., Wang, Q. and Li, R. (2021). Central limit theorem for linear spectral statistics of large dimensional Kendall's rank correlation matrices and its applications. *Annals of Statistics*. 49, 1569-1593.
- 60. Xiao, D., Ke, Y. and Li, R. (2021). Homogeneity structure learning in large-scale panel data with heavy-tailed errors. *Journal of Machine Learning Research*. **22 22(13)**:1-42, 2021.
- 61. Huang, D., Zhu*, X., Li, R. and Wang, H. (2021). Feature screening for network data. Statistica Sinica. 31, 1239 - 1259. (PMCID: PMC8290873)
- 62. Wang*, J., Cai, X. and Li, R. (2021). Variable selection for partially linear models via Bayesian subset modeling with diffusing prior. *Journal of Multivariate Analysis.* **183**, 104733. https://doi.org/10.1016/j.jmva.2021.104733 (NIHMS: 1685646).
- Li*, M, Li, R. and Ma, Y. (2021). Inference in high-dimensional linear measurement error model. *Journal of Multivariate Analysis*. 184. 104759. https://doi.org/10.1016/j.jmva.2021.104759
- 64. Parikh, R. Liu, M., Li, E., Li, R. and Chen, J. (2021). Trajectories of mortality risk among patients with cancer and associated end-of-life utilization. *Nature Partner Journals (npj) Digital Medicine*. **4 (104)**, https://doi.org/10.1038/s41746-021-00477-6.
- 65. Li*, C., Wang[†], X., Du, G, Chen, H, Brown, G., Lewis, M.M., Yao, T., Li, R., Huang, X. (2021). Folded concave penalized learning in identifying high-dimensional MRI markers for Parkinson's disease: a benchmark of whole brain MRI markers. *Journal of Neuroscience Methods.* **357**, 109157. https://doi.org/10.1016/j.jneumeth.2021.109157
- 66. Buu, A., Cai, Z., Li, R., Wong, S.W., Lin, H.C., Su, W.C., Jorenby, D.E., and Piper, M.E. (2021). Validating e-cigarette dependence scales based on dynamic patterns of vaping behaviors. *Nicotine & Tobacco Research.* 23, 1484 1489. https://doi.org/10.1093/ntr/ntab050
- 67. Buu, A., Cai[†], Z., Li, R., Wong, S., Lin, H., Su, W., Jorenby, D.E., and Piper, M.E. (2021). The association between short-term emotion dynamics and cigarette dependence: a comprehensive examination of dynamic measures. *Drug and Alcohol Dependence*. **218**, 108341. DOI: 10.1016/j.drugalcdep.2020.108341

- 68. Wang, L., Peng[†], B., Bradic, J., Li, R. and Wu[†], Y. (2020). A tuning-free robust and efficient approach to high-dimensional regression (with discussions and rejoinder). *Journal of American Statistical Association.* **115**, 1700 1729.
- 69. Fang, X. E., Ning, Y. and Li, R. (2020). Test of significance for high-dimensional longitudinal data. *Annals of Statistics*. **48**, 2622 2645 (PMCID: PMC8277154)
- 70. Zhou[†], T., Zhu, L., Xu*, C. and Li, R. (2020). Model-free forward regression via cumulative divergence. *Journal of American Statistical Association*. **115**, 1393 1405. (PMCID: PMC7821979)
- 71. Zou, C., Wang, G. and Li, R. (2020). Consistent selection of the number of change-points via sample-splitting. *Annals of Statistics.* **48**, 413-439. (PMCID: PMC7397423)
- 72. Cui, X., Li, R., Yang, G. and Zhou, W. (2020). Empirical likelihood test for large dimensional mean vector. *Biometrika*. **107**, 591 607.
- 73. Wang*, L., Chen, Z., Wang, C. D. and Li, R. (2020). Ultrahigh dimensional precision matrix estimation via refitted cross validation. *Journal of Econometrics*. **215**, 118-130. (PMCID: PMC7405931)
- 74. Chu*, W., Li, R., Liu, J. and Reimherr, M. (2020). Feature screening for generalized varying coefficient mixed effect models with application to obesity GWAS. *Annals of Applied Statistics*. **14**, 276 298. (PMCID: PMC7426018)
- 75. Cai*, Z, Li, R. and Zhu, L. (2020). Online Sufficient Dimension Reduction Through Sliced Inverse Regression. *Journal of Machine Learning and Research.* **21**(10), 1-25.
- 76. Li[†], X., Li, R., Xia, Z. and Xu, C. (2020). Distributed feature screening via componentwise debiasing. *Journal of Machine Learning and Research.* **21** (24), 1-32.
- 77. Yang, G., Yang*, S. and Li, R. (2020). Feature screening in ultrahigh dimensional generalized varying-coefficient models. *Statistica Sinica*. **30**, 1049 1067. (PMCID: PMC7516887)
- 78. Dziak, J., Coffman, D. L., Lanza, S. T., Li, R. and Jermiin, L. S. (2020). Sensitivity and specificity of information criteria. *Briefings in Bioinformatics.* **21**, 553-565.
- 79. Yang, S., Wen, J., Eckert, S. T., Wang, Y., Liu, D., Wu, R., Li, R. and Zhan, X. (2020). Prioritizing genetic variants in GWAS using permutation-assisted lasso tuning. *Bioinformatics*. **36**, 3811-3817. (PMC Journal)
- 80. Trucco, E. M., Yang, S., Yang, J. J., Zucker, R. A., Li, R. and Buu, A. (2020). Time-varying Effects of GABRG1 and Maladaptive Peer Behavior on Externalizing Behavior from Childhood to Adulthood: Testing Gene x Environment x Development Effects" *Journal of Youth and Adolescence*, 49, 1351 1364.
- 81. Fan, J. and Li, R. (2020). Comment: Feature screening and variable selection via iterative ridge regression. *Technometrics.* **62**, 434 437 (PMCID: PMC7839987)

- 82. Coffman, D., Cai, X., and Li, R. (2020). Challenges and opportunities in collecting and modeling ambulatory electrodermal activity data. *JMIR Biomedical Engineering*. **5(1)**:e17106. doi: 10.2196/17106
- 83. Buu, A., Yang, S., Li, R., Zimmerman, M.A., Cunningham, R.M., and Walton, M.A. (2020). Examining measurement reactivity in daily diary data on substance use: results from a randomized experiment. *Addictive Behaviors*. **102**. 106198. https://doi.org/10.1016/j.addbeh.2019.106198. (PMCID: PMC6934919)
- 84. Zhong, P.-S., Li, R. and Santo, S. (2019). Homogeneity test of covariance matrices and change-points identification with high-Dimensional longitudinal data. *Biometrika*. **106**, 619 634. (NIHMSID: 1022725)
- 85. Zheng, S., Chen*, Z., Cui, H. and Li, R. (2019). Hypothesis testing on linear structures of high dimensional covariance matrix. *Annals of Statistics*. **47**, 3300 3334. (PMCID: PMC6910252)
- 86. Shi[†], C., Song, R., Chen*, Z. and Li, R. (2019). Linear hypothesis testing for high dimensional generalized linear models. *Annals of Statistics*. **47**, 2671 2703. (PMCID: PMC6750760)
- 87. Zhu*, X., Chang, X., Wang, H. and Li, R. (2019). Portal nodes screening for large scale social networks. *Journal of Econometrics*. **209**, 145-157. (NIHMSID: 1022751)
- 88. Liu[†], H., Wang[†], X., Yao, T., Li, R. and Ye, Y. (2019). Sample average approximation with sparsity-inducing penalty for high-dimensional stochastic programming. *Mathematical Programming*. **78**, 69-108 (PMCID: PMC6824431)
- 89. Li*, M, Ma, Y. and Li, R. (2019). Semiparametric regression for measurement error model with heteroscedastic error. *Journal of Multivariate Analysis*. **171**, 320 338. (PMCID: PMC6383778)
- 90. Yang, G., Zhang*, L., Li, R. and Huang, Y. (2019). Feature screening in ultrahigh-dimensional varying-coefficient Cox model. *Journal of Multivariate Analysis.* **171**, 284 297. (PMCID: PMC6924954)
- 91. Dziak, J.J., Coffman, D. L., Reimherr, M., Petrovich, J., Li, R. and Shiffman, S. (2019). Scalar-on-function regression for predicting distal outcomes from intensively gathered longitudinal data: Interpretability for applied scientists. *Statistical Survey.* 13, 150 -180. (PMCID: PMC6863606)
- 92. Wang, L., Ma, J., Dholakia, R., Howells, C., Lu, Y., Chen, C., Li, R., Murray, M. and Leslie, D. (2019). Changes in healthcare expenditures after the autism insurance mandate. *Research in Autism Spectrum Disorders*, **57**, 97-104.
- 93. Liu, W., Li, R., Zimmerman, M.A., Walton, M.A., Cunningham, R.M., and Buu, A. (2019). Statistical methods for evaluating the correlation between timeline follow-back data and daily process data with applications to research on alcohol and marijuana use. Addictive Behaviors: Special Issue on "Improving the Implementation of Quantitative methods in Addiction Research." 94, 147 155. (NIHMSID: 1022755)

- 94. Chen*, Z., Fan, J. and Li, R. (2018). Error variance estimation in ultrahigh dimensional additive models. *Journal of American Statistical Association*. **113**, 315 327. (PMCID: PMC6052885)
- 95. Li, R., Ren, J.J., Yang, G. and Ye*, Y. (2018). Asymptotic behavior of Cox's partial likelihood and its application to variable selection. *Statistica Sinica*. **28**, 2713 2731. (NIHMSID: NIHMSID866285)
- 96. Liu, J., Lou*, L. and Li, R. (2018). Variable Selection for Partially Linear Models via Partial Correlation. *Journal of Multivariate Analysis*. **167**, 418 434. (PMCID: PMC6555488)
- 97. Kurum*, E., Hughes, J., Li, R. and Shiffman, S. (2018). Time-varying copula models for longitudinal data. *Statistics and its Interface*. **11**, 203-211. (PMCID: PMC5909848)
- 98. Dierker, L., Selya, A., Lanza, S., Li, R. and Rose, J. (2018). Depression and marijuana use disorder symptoms among current marijuana users. *Addictive Behaviors*, **76**, 161 168. (PMCID: PMC5614863)
- 99. Zhu, L., Xu[†], K., Li, R. and Zhong, W. (2017). Project correlation between two random vectors. *Biometrika*. **104**, 829 843. (PMCID: PMC5793497)
- 100. Ma, S., Li, R. and Tsai, C.-L. (2017). Variable screening via partial quantile correlation. Journal of American Statistical Association. 112, 650 - 663. (PMCID: PMC5603281)
- 101. Liu[†], H., Yao, T, Li, R. and Ye, Y. (2017). Folded concave penalized sparse linear regression: complexity, sparsity, statistical performance, and algorithm theory for local solutions. Mathematical Programming SERIES A. 166, 207-240. (PMCID: PMC5720392)
- 102. Li, R., Liu, J. and Lou*, L. (2017). Variable selection via partial correlation. *Statistica Sinica*. **27**. 983 996. (PMCID: PMC5484095)
- 103. Du, G., Lewis, M. M., Kanekar, S., Sterling, N. W., He, L., Kong, L, Li, R. and Huang, X. (2017). Combined diffusion tensor imaging and R2* differentiate Parkinson's disease and atypical Parkinsonism. *American Journal of Neuroradiology*. 38, 966-972 (PMCID: PMC5433885)
- 104. Zhang, L., Wang, X., Wang, M., Sterling, N. W., Du, G. Lewis, M. M., Yao, T., Mailman, R. B., Li, R. Huang, X. (2017). Circulating cholesterol levels may link to the factors influencing Parkinson's risk. Frontiers in Neurology, 8, 501. doi: 10.3389/fneur.2017.00501 (PMCID: PMC5624032)
- 105. Miao, J., Chen*, Z. Sebastian, A. Wang, Z., Shrestha, S., Li, X., Praul, C., Albert, I., Li, R. and Cui, L. (2017). Sex-specific biology of the human malaria parasite revealed from transcriptomes and proteomes of male and female gametocytes. *Molecular and Cellular Proteomics.* 16, 537 551. (PMCID: PMC5383777).
- 106. Wang*, L., Liu, J., Li, Y. and Li, R. (2017). Model-free conditional independence feature screening for ultrahigh dimensional data. Science China Mathematics. 60. 551 568. (PM-CID: PMC5480220)

- 107. Yang*, S., Cranford, J. A., Jester, J. M., Li, R., Zucker, R. A. and Buu, A. (2017). A time-varying effect model for examining group differences in trajectories of zero-inflated count outcomes with applications in substance abuse research. *Statistics in Medicine*. **36**, 827 837. (PMCID: PMC5242179)
- 108. Yang*, S., Cranford, J. A., Li, R., Zucker, R. A. and Buu, A. (2017). A time-varying effect model for studying gender differences in health behavior. Statistical Methods in Medical Research. 26, 2812-2820. (PMCID: PMC4860169)
- 109. Liu[†], H., Yao, T. and Li, R. (2016). Global solutions to folded concave penalized nonconvex learning. *Annals of Statistics.* **44**, 629-659. (PMCID: PMC4851172)
- 110. Zhang[†], X., Wu, Y., Wang, L. and Li, R. (2016). Variable selection for support vector machine in moderately high dimensions. *Journal of Royal Statistical Society, Series B.* **78**, 53 76. (PMCID: PMC4709852)
- 111. Pan[†], R., Wang, H. and Li, R. (2016). Ultrahigh dimensional multi-class linear discriminant analysis by pairwise sure independence screening. *Journal of American Statistical Association*. **111**, 169 179. (PMCID: PMC5256914).
- 112. Chu*, W., Li, R. and Reimherr, M. (2016). Feature screening for time-varying coefficient models with ultrahigh dimensional longitudinal data. *Annals of Applied Statistics*. **10**, 596 617. (PMCID: PMC5019497)
- 113. Li, D. and Li, R. (2016). Local composite quantile regression smoothing for Harris recurrent Markov processes. *Journal of Econometrics*. **194**. 44 56. (PMCID: PMC5033131)
- 114. Lan[†], W., Zhong, P., Li, R., Tsai, C.-L. and Wang, H. (2016). Single coefficient test in high dimensional linear models. *Journal of Econometrics.* **195**, 154 168. (PMCID: PMC5484175)
- 115. Zhang[†], X., Wu, Y., Wang, L. and Li, R. (2016). A consistent information criterion for support vector machines in diverging model spaces. *Journal of Machine Learning Research*. **17**, 1-26. (PMCID: PMC4883123).
- 116. Xu*, C., Zhang, Y., Li, R. and Wu, X. (2016). On the Feasibility of Distributed Kernel Regression for Big Data. *IEEE Transactions on Knowledge and Data Engineering*. 28, 3041 3052. (PMCID: PMC4856170)
- 117. Zhong*, W., Zhu, L., Li, R. and Cui, H. (2016). Regularized quantile regression and robust feature screening for single index models. *Statistica Sinica*. **26** 69 95. (PMCID: PMC4771381)
- 118. Xu*, C., Lin, S., Fang, J. and Li, R. (2016). Prediction-based termination rule for greedy learning with massive data. *Statistica Sinica*. **26**, 841 860. (PMCID: PMC4856170)
- 119. Yang, G., Yu*, Y., Li, R. and Buu, A. (2016). Feature screening in ultrahigh dimensional Cox's model. *Statistica Sinica*. **26**, 881 902. (PMCID: PMC4939909)
- 120. Kürüm*, E., Li, R., Shiffman, S. and Yao, W. (2016). Time-varying coefficient models for joint modeling binary and continuous outcomes in longitudinal data. *Statistica Sinica.* **26**, 979 1000. (PMCID: PMC5033066)

- Liu, X, Cui, Y. and Li, R. (2016). Partial linear varying multi-index coefficient model for integrative gene-environment interactions. Statistica Sinica. 26, 1037 - 1060. (PMCID: PMC5033130)
- 122. Kurum*, E., Hughes, J. and Li, R. (2016). A semivarying joint model for longitudinal binary and continuous outcomes. *Canadian Journal of Statistics*. **44**, 44 57. (PMCID: PMC5033063)
- 123. Yang*, H., Li, R., Zucker, R and Buu, A. (2016). Two-stage model for time-varying effects of zero-inflated count longitudinal covariates with applications in health behavior research. *Journal of Royal Statistical Society, Series C.* **65**, 431 444. (PMCID: PMC4812831)
- 124. Liu[†], H., Du, G. Zhang, L., Lewis, M., Wang, X., Yao, T., Li, R. and Huang, X. (2016). Folded concave penalized learning in identifying multimodal MRI marker for Parkinson's disease. *Journal of Neuroscience Methods.* **268**, 1 6. (PMCID: PMC4913043).
- 125. Wang, N.T.*, Gocik, K., Li, R., Lindsay, B. and Wu, R. (2016). A block mixture model to map eQTLs for gene clustering and networking. *Sci Rep*, **6**: 21193. (PMCID: PMC4759821)
- 126. Cui, H., Li, R. and Zhong, W. (2015). Model-free feature screening for ultrahigh dimensional discriminant analysis. *Journal of American Statistical Association*. 110. 630 - 641 (PMCID: PMC4574103)
- 127. Wang, L., Peng[†], B. and Li, R. (2015). A high-dimensional nonparametric multivariate test for mean vector. *Journal of American Statistical Association*. **110**. 1658 1669. (PMCID: PMC4734767)
- 128. Li*, J., Wang, Z., Li, R. and Wu, R. (2015). Bayesian group LASSO for nonparametric varying-coefficient models with application to functional genome-wide association studies. *Annals of Applied Statistics.* **9**, 640-664. (PMCID: PMC4605444)
- 129. Chen*, Z., Li, R. and Li*, Y. (2015). Varying-coefficient models for data with auto-correlated error process. *Statistica Sinica*. **25**, 709 724. (PMCID: PMC4403010)
- 130. Yi, G. Y., Tan, X. and Li, R. (2015). Variable selection and inference procedures for marginal analysis of longitudinal data with missing observations or measurement error. *Canadian Journal of Statistics.* **43**, 498 518. (PMCID: PMC4751048)
- 131. Yang*, H., Cranford, J., Li, R. and Buu, A. (2015). Two-stage model for time-varying effects of discrete longitudinal covariates with applications in analysis of daily process data. *Statistics in Medicine*. **34**, 571 581. (PMCID: PMC4314391)
- 132. Dziak, J., Li, R., Tan, X., Shiffman, S. and Shiyko, M. (2015). Modeling intensive longitudinal data on smoking cessation with mixtures of nonparametric trajectories and time-varying effects. *Psychological Methods.* **20**, 444-469 (PMCID: PMC4679529)
- 133. Selya[†], A. S., Updegrove, N., Rose, J., Dierker, L., Tan, X., Hedeker, D., Li, R. and Mermelstein, R. J. (2015). Nicotine Dependence-Varying Effects of Smoking Events on Momentary Mood Changes among Adolescents. *Addictive Behaviors*. **41**, 65-71. (PMCID: PMC4252301)

- 134. Liu, J, Zhong, W. and Li, R. (2015). A selective overview of feature screening for ultrahigh dimensional data. *Science China: Mathematics.* **58**, 2033 2054. doi: 10.1007/s11425-015-5062-9 (PMCID: PMC4711389)
- 135. Li*, J., Zhong*, W., Li, R. and Wu, R. (2014). A fast algorithm for detecting gene-gene interactions in genome-wide association studies. *The Annals of Applied Statistics.* **8**, 2292 2318. (PMCID: PMC4605444)
- 136. Liu*, J., Li, R. and Wu, R. (2014). Feature Selection for varying coefficient models with ultrahigh dimensional covariates. *Journal of American Statistical Association*. **109**, 266 274. (PMCID: PMC3963210)
- 137. Wang, L, Sherwood[†], B. and Li, R. (2014). Discussion of "Estimation and Accuracy after Model Selection" by Brad Efron. *Journal of American Statistical Association*. **109**, 1007 1010. (PMCID: PMC4237207)
- 138. Chen[†], H., Wang, Y., Li, R. and Shear, K. (2014). A note on a nonparametric regression test through penalized splines. *Statistics Sinica*. **24**, 1143-1160 (PMCID: PMC4112131)
- 139. Huang*, M, Li, R., Wang, H. and Yao, W. (2014). Estimating mixture of Gaussian processes by kernel smoothing. *Journal of Business and Economic Statistics*. **32**, 259-270. (NIHMSID: NIHMS548753)
- 140. Huang[†], D., Li, R. and Wang, H. (2014). Feature screening for ultrahigh dimensional categorical data with applications. *Journal of Business and Economic Statistics*. **32**, 237-244 (NIHMSID: NIHMS590985)
- 141. Dziak, J., Li, R., Zimmerman, M. and Buu, A. (2014). Time-varying effect models for ordinal responses with applications in substance abuse research. *Statistics in Medicine*. **33**, 5126 5137. (PMCID: PMC4227951)
- 142. Buu, A., Li, R., Walton, M., Yang*, H., Zimmerman, M. A., Cunningham, R. M. (2014). Changes in substance use-related health risk behaviors on the timeline follow-back interview as a function of length of recall period. Substance Use and Misuse. 49. 1259-1269. (NIHMSID: NIHMS591800)
- 143. Trail*, J. B., Collins, L. M., Rivera, D. F., Li, R, Piper, M. E., Baker, T. B. (2014). Functional Data Analysis for Dynamical System Identification of Behavioral Processes. *Psychological Methods.* **19**, 175-187. (NIHMS ID: NIHMS588226)
- 144. Percival[†], C. J., Huang^{*}, Y., Jabs, E. W., Li, R. and Richtsmeier, J. T. (2014), Embryonic craniofacial bone volume and bone mineral density in Fgfr2⁺/P253R and nonmutant mice. *Developmental Dynamics.* **243**, 541-551. DOI: 10.1002/dvdy.24095
- 145. Lanza, S.T., Vasilenko[†], S., Liu*, X., Piper, M. and Li, R. (2014). Advancing Understanding of the Dynamics of Smoking Cessation Using the Time-Varying Effect Model. *Nicotine & Tobacco Research.* **16S2**, S127-S134. (PMCID: PMC3977629)

- 146. Vasilenko[†], S., Piper, M., Lanza, S.T. Liu*, X., Yang*, J., Li, R. (2014). Time-varying processes involved in smoking lapse in a randomized trial of smoking cessation therapies. *Nicotine & Tobacco Research.* **16S2**, S135-S143. (PMCID: PMC3977637)
- 147. Shiyko, M., Naab, P., Shiffman, S. and Li, R. (2014). Modeling complexity of EMA data: time-varying lagged effects of negative affect on smoking urges for subgroups of nicotine addiction. *Nicotine & Tobacco Research.* **16S2**, S144-S150. (PMCID: PMC3977630)
- 148. Shiyko, M.P., Burkhalter, J., Li., R., and Park, B. J. (2014). Modeling nonlinear time-dependent treatment effects: An application of the time-varying effects model (TVEM). *Journal of Consulting and Clinical Psychology.* 82, 760-72 (PMCID: PMC4067470)
- 149. Kürüm*, E., Li, R., Wang*, Y. and Sentürk, D. (2014). Nonlinear varying-coefficient models with applications to a photosynthesis study. *Journal of Agricultural, Biological, and Environmental Statistics.* **19**, 57-81. (NIHMSID: NIHMS591009)
- Zhao, Z., Zhang*, Y. and Li, R. (2014). Non-parametric estimation under strong dependence.
 Journal of Time Series. 35, 4 15. (PMCID: PMC4092009)
- 151. Wang*, N., Wang, T., Han*, H., Huber, K.J., Yang, J.-M., Li, R. and Wu, R. (2014). Modeling expression plasticity of genes that differentiate drug-sensitive from drug-resistant cells to chemotherapeutic treat. *Current Genomics.* **15**, 349 356.
- 152. Wang, L., Kim. Y. and Li, R. (2013). Calibrating nonconvex penalized regression in ultrahigh dimension. *Annals of Statistics.* 41, 2505 2536. (NIHMSID: NIHMS590995)
- 153. Huang*, M., Li, R. and Wang, S. (2013). Nonparametric mixture of regression models. Journal of American Statistical Association. 108, 929 - 941. (PMCID: PMC3865811)
- 154. Yao*, W. and Li, R. (2013). New local estimation procedure for nonparametric regression function of longitudinal data. *Journal of Royal Statistical Society, Series B.* **75**, 123-138. (PMCID: PMC3607647)
- 155. Zhu*, L., Dong, Y. and Li, R. (2013). Semiparametric estimation of conditional heteroscedasticity through single index modeling. *Statistica Sinica*. **24**, 1235 1256. (PMCID: PMC3901164)
- 156. Das*, K., Li, J., Fu*, G., Wang, Z., Li, R. and Wu, R. (2013). Dynamic semiparametric Bayesian models for genetic mapping of complex trait with irregular longitudinal data. *Statistics in Medicine.* **32**, 509 523. PMCID: PMC3770845)
- 157. Das*, K., Li, R., Sengupta, S. and Wu, R. (2013). A Bayesian semiparametric model for bivariate sparse longitudinal data. *Statistics in Medicine*. **32**, 3899 3910. (PMCID: PMC3740051)
- 158. Selya[†], A.S., Dierker, L. C., Rose, J. S., Hedeker, D., Tan*, X., Li, R., Mermelstein, R.J. (2013). Time-varying effects of smoking quantity and nicotine dependence on adolescent smoking regularity. *Drug and Alcohol Dependence*. **128**, 230-237. (PMCID: PMC3538104)
- 159. Liu*, X., Li, R., Lanza, S.T., Vasilenko, S. and Piper, M. (2013). Understanding the role of cessation fatigue in the smoking cessation process. *Drug and Alcohol Dependence*. **133**, 548 555. (NIHMSID: NIHMS583125)

- 160. Zhu*, L, Li, R. and Cui, H. (2013). Robust estimation for partially linear models with large-dimensional covariates. *Science China: Mathematics.* **56**, 2069 2088. (PMCID: PMC4060755)
- 161. Wang[†], S, Cui, H. and Li, R. (2013). Empirical likelihood inference for semiparametric estimation equations. *Science China: Mathematics.* **56**, 1247 1262.
- 162. Li, R., Lin, D. K. J. and Li, B. (2013). Statistical Inference in Massive Data Sets. *Applied Stochastic Models in Business and Industry.* **29**, 399 409.
- 163. Zhu, H., Li, R. and Kong[†], L. (2012). Multivariate varying coefficient model for functional responses. *Annals of Statistics*. **40**, 2634 2666. (PMCID: PMC3641708)
- 164. Fan, Y. and Li, R. (2012). Variable selection in linear mixed effects models. Annals of Statistics. 40, 2043 - 2068. (NIHMSID: 408816)
- 165. Li, R., Zhong*, W. and Zhu*, L. (2012). Feature screening via distance correlation learning. Journal of American Statistical Association. 107, 1129-1139. (PMCID: PMC4170057)
- 166. Wang, L., Wu, Y. and Li, R. (2012). Quantile regression for analyzing heterogeneity in ultra-high dimension. *Journal of American Statistical Association*. **107**, 214 222. (PMCID: PMC3471246)
- 167. Zhu*, L., Huang, M. and Li, R. (2012). Semiparametric quantile regression with high dimensional covariates. *Statistica Sinica*. **22**, 1379-1401. (PMCID: PMC3910001)
- 168. Chen*, Z., Li, R. and Wu, Y. (2012). Weighted quantile regression for AR model with infinite variance errors. *Journal of Nonparametric Statistics*. **24**, 715 731. (PMCID: PMC3595619)
- 169. Wang, Y., Huang, C., Fang, Y., Yang, Q. and Li, R. (2012). Flexible semiparametric analysis of longitudinal genetic studies by reduced rank smoothing. *Journal of Royal Statistical Society, Series C.* **61**, 1-24. (PMCID: PMC3348702)
- 170. Yao*, W., Lindsay, B. G. and Li, R. (2012). Local modal regression. *Journal of Nonparametric Statistics*. **24**, 647-663. (PMCID: PMC3462466)
- 171. Buu, A., Li, R., Tan*, X. and Zucker, R. A. (2012). Statistical models for longitudinal zero-inflated count data with applications to the substance abuse field. *Statistics in Medicine*. **31**, 4074 4086. (PMCID: PMC3505239)
- 172. Shiyko*, M. P., Lanza, S. T., Tan*, X., Li, R. and Shiffman, S. (2012). Using the time-varying effects model (TVEM) to examine dynamic associations between negative affect and self confidence on smoking urges: differences between successful quitters and relapsers. *Prevention Science.* 13, 288-299 (PMCID: PMC3372905)
- 173. Tan*, X., Shiyko*, M., Li, R., Li, Y. and Dierker, L. (2012). A time-varying effect model for intensive longitudinal data. *Psychological Methods.* 17, 61-77. (PMCID: PMC3288551)
- 174. Wang, Z., Liu*, J., Wang, J., Wang*, Y., Wang*, N., Li, Y., Li, R. and Wu, R. (2012). Dynamic mapping of genes controlling cancer stem cell proliferation. *Front. Genet.* 3:84. doi: 10.3389/fgene.2012.00084 (PMCID: PMC3357477)

- 175. Liu*, J., Wang, Z., Wang*, Y., Li, R. and Wu, R. (2012). Model and Algorithm for Linkage Disequilibrium Analysis in a Non-equilibrium Population. *Front. Genet.* 3:78. doi: 10.3389/fgene.2012.00078 (PMCID: PMC3386617)
- 176. Das*, K., Li, R., Huang, Z., Gai, J. and Wu, R. (2012). A Bayesian framework for functional mapping through joint modeling of longitudinal and time-to-event data. *International Journal of Plant Genomics*, **2012**. doi:10.1155/2012/680634. (PMCID: PMC3364578)
- 177. Wang*, Y., Xu, M., Wang, Z., Tao, M., Zhu, J., Li, R., Wang, L. Berceli, S.A. and Wu, R. (2012). How to cluster gene expression dynamics in response to environmental signals. *Briefings in Bioinformatics*. **13**, 162-174 (PMCID: PMC3294239)
- 178. Zhu*, L, Li, L., Li, R. and Zhu, L.-X. (2011). Model-free feature screening for ultrahigh dimensional data. *Journal of American Statistical Association*. **106**, 1464 1475. (PMCID: PMC3384506)
- 179. Kai*, B., Li, R. and Zou, H. (2011). New efficient estimation and variable selection methods for semiparametric varying-coefficient partially linear models. *Annals of Statistics*. **39**, 305-332. (PMCID: PMC3109949)
- 180. Wang, Y., Chen[†], H., Li, R., Duan, N. and Lewis-Fernandez, R. (2011). Prediction-based structured variable selection through receiver operating curve. *Biometrics*. **67**, 896 905. (PMCPMCID: PMC3134557)
- 181. Buu, A. Johnson, N.J., Li, R. and Tan*, X. (2011). New variable selection methods for zero-inflated count data with applications to the substance abuse field. *Statistics in Medicine*. **30**, 2326 2340. (PMCID: PMC3133860)
- 182. Li*, J., Das*, K., Fu*, G., Li, R. and Wu, R. (2011). The Bayesian LASSO for genome-wide association studies. *Bioinformatics*. **27**, 516 523. (PMCID: PMC3105480)
- 183. Zhu, H., Kong[†], L., Li, R., Styner, M., Gerig, G., Lin, W. and Gilmore, J. H. (2011). FADTTS: Functional Analysis of Diffusion Tensor Tract Statistics. *Neuroimage*. **56**, 1412 1425 (PMCID: PMC3085665)
- 184. Tan*, X., Dierker, L., Li, R., Rose, J., and The Tobacco Etiology Research Network(TERN). (2011). How spacing of data collection may impact estimates of substance use trajectories? Substance Use and Misuse. 46, 758 - 768 (PMCID: PMC3107528)
- 185. Das*, K., Li*, J., Wang, Z., Fu*, G., Tong, C. Li, Y., Xu, M., Ahn, K., Mauger, D.T. Li, R., and Wu, R. (2011). A dynamic model for genome-wide association studies. *Human Genetics*. **129**, 629-639. (PMCID: PMC3103104)
- 186. Fu*, G., Luo, J., Berg, A., Wang, Z., Li, J., Das*, K., Li, R. and Wu, R. (2011) A dynamic model for functional mapping of biological rhythms. *Journal of Biological Dynamics*. 5, 84-101. (PMCID: PMC3027063)
- 187. Cole, P. M., Tan[†], P. Z., Hall, S. E., Zhang^{*}, Y., Crnic, K. A., Blair, C. B., and Li, R. (2011). Developmental changes in anger expression and attention focus during a delay: Learning to wait. *Developmental Psychology*, 47, 1078-1089. (PMCID: PMC3134567)

- 188. Kim*, K., Senturk, D. and Li, R. (2011). Recent History Functional Linear Models for Sparse Longitudinal Data. *Journal of Statistical Planning and Inference*. **141**, 1554 1566. (PMCID: PMC3117473)
- 189. Liang, H, Liu[†], X., Li, R. and Tsai, C.-L. (2010). Estimation and testing for partially linear single-index models. *Annals of Statistics*. **38**, 3811-3836. (PMCID: PMC3102543)
- 190. Zhang*, Y., Li, R. and Tsai, C.-L. (2010). Regularization parameter selections via generalized information criterion. *Journal of American Statistical Association*. 105, 312-323. (PMCID: PMC2911045)
- 191. Kai*, B., Li, R. and Zou, H. (2010). Local CQR smoothing: an efficient and safe alternative to local polynomial regression. *Journal of Royal Statistical Society, Series B*, **72**, 49-69. (PMCID: PMC2958780)
- 192. Yin[†], J., Geng, Z., Li, R. and Wang, H. (2010). Nonparametric covariance model. *Statistica Sinica*. **20**, 469-479. (PMCID: PMC3002111)
- 193. Ma, Y. and Li, R. (2010). Variable selection in measurement error models. *Bernoulli*. **16**, 274-300. (PMCID: PMC2832228)
- 194. Yi, C., Ricciuto, D., Li, R., et al. (2010). Climate control to terrestrial carbon exchange across biomes and continents. *Environmental Research Letters*. **5**:034007. doi: 10.1088/1748-9326/5/3/034007
- 195. Fu*, G., Berg, A. Das*, K., Li*, J., Li, R. and Wu, R. (2010). A statistical model for mapping morphological shape. *Theoretical Biology and Medical Modelling*, **7**:28. doi:10.1186/1742-4682-7-28 (PMCID: PMC2915964)
- 196. Dierker, L., Rose, J., Tan*, X., Li, R. and The Tobacco Etiology Research Network(TERN) (2010). Uncovering multiple pathways to substance use: A comparison of methods for identifying population subgroups. The Journal of Primary Prevention. 31, 333 348 (PMCID: PMC3107529)
- 197. Feng*, Y., Li, R., Sudjianto, A. and Zhang*, Y. (2010). Neural network quantile regression with applications to analysis of credit portfolio data. *Statistics and its Interface*. **3**, 437-444. (PMCID: PMC3115719)
- 198. Wang, L., Kai*, B. and Li, R. (2009). Local rank inference for varying coefficient models. Journal of American Statistical Association. 104, 1631 – 1645. (PMCID: PMC2908045)
- 199. Liang, H. and Li, R. (2009). Variable selection for partially linear models with measurement errors. *Journal of American Statistical Association*. **104**, 234-248. (PMCID: PMC2697854)
- 200. Wang, L. and Li, R. (2009). Weighted Wilcoxon-type smoothly clipped absolute deviation method. *Biometrics.* **65**, 564-571. (PMCID: PMC2700846)
- 201. Li, R. and Li*, Y. (2009). Local linear regression for data with AR errors. Special Issue of Acta Mathematicae Applicatae Sinica (English Series). 25, 427-444. (PMCID: PMC2779551)

- 202. Collins, L. M., Dziak*, J. J. and Li, R. (2009). Design of experiments with multiple independent variables: A resource management perspective on complete and reduced factorial designs. *Psychological Methods*, 14, 202-224. (PMCID: PMC2796056)
- 203. Li, R. and Lin, D. K.-J. (2009). Variable selection for screening experiments. *Quality Technology and Quantitative Management*, **6**, 271-280. (PMCID: PMC2910252)
- 204. Zou, H. and Li, R. (2008). One-step sparse estimates in nonconcave penalized likelihood models (with discussion). *Annals of Statistics*. **36**, 1509-1566. (PMCID: PMC2759727)
- 205. Li, R. and Liang, H. (2008). Variable selection in semiparametric regression modeling. *Annals of Statistics.* **36**, 261-286. (PMCID: PMC2605629)
- 206. Li, R. (2008) Discussion of "Sure independence screening for ultrahigh dimensional feature space" by Fan and Lv. *Journal of Royal Statistical Society, Series B.* 70, 898.
- 207. Li, R. and Nie, L. (2008). Efficient statistical inference procedures for partially nonlinear models and their applications. *Biometrics.* **64**, 904-911. (PMCID: PMC2679946)
- 208. Zhang*, Z., Li, R. and Sudjianto, A. (2008). Modeling computer experiments with multiple responses. SAE 2007 Transactions Journal of Passenger Cars Mechanical Systems.
- 209. Wang, H., Li, R. and Tsai, C.-L. (2007). Tuning parameter selectors for the smoothly clipped absolute deviation method. *Biometrika*. **94**, 553-568. (PMCID: PMC2663963)
- 210. Fan, J. Huang[†], T. and Li, R. (2007). Analysis of longitudinal data with semiparametric estimation of covariance function. *Journal of American Statistical Association*. **102**, 632-641. (PMCID: PMC2730591)
- 211. Li, R. and Nie, L. (2007). A new estimation procedure for partially nonlinear model via a mixed effects approach. *Canadian Journal of Statistics*. **35**, 399-411.
- 212. Fang, K.T., Zhang[†], A. and Li, R. (2007). An effective algorithm for generation of fractional designs with generalized minimum aberration. *Journal of Complexity*. **23**, 740-751. (PMCID: PMC2743033)
- 213. Yin[†], H., Fang, K.-T., Li, R. and Liang, Y.-Z. (2007). Empirical Kriging models and their applications to QSAR., *Journal of Chemometrics*. **21**, 43-52.
- 214. Fan, J. and Li, R. (2006). Statistical challenges with high-dimensionality: feature selection in knowledge discovery. Proceedings of International Congress of Mathematicians (ICM) (M. Sanz-Solé, J. Soria, J.L. Varona, J. Verdera, eds.), Vol. III, European Mathematical Society, Zürich, 595-622.
- 215. Qu, A. P. and Li, R. (2006). Quadratic inference functions for varying-coefficient models with longitudinal data. *Biometrics.* **62**, 379-391. (PMCID: PMC2680010)
- 216. Peng[†], X.-L., Yin[†], H., Li, R. and Fang, K.-T. (2006). The application of kriging and empirical kriging based on the variables selected by SCAD. *Analytica Chimica Acta*, **578**, 178-185.

- 217. Li, R., Sudjianto, A. and Zhang*, Z. (2006). Modeling computer experiments with functional response. SAE 2005 Transactions Journal of Passenger Cars Mechanical Systems. 1661-1666.
- 218. Fang, K.T. and Li, R. (2006). Uniform design for computer experiments and its optimal properties. *International Journal of Material and Product Technology.* **25**, 198-210.
- 219. Zhang[†], A., Fang, K.-T., Li, R. and Sudjianto, A. (2005). Majorization framework for balanced lattice designs. *Annals of Statistics*. **33**, 2837–2853.
- 220. Hunter, D. R. and Li, R. (2005). Variable selection using MM algorithms. *Annals of Statistics*. **33**, 1617–1642. (PMCID: PMC2674769)
- 221. Cai, J., Fan, J., Li, R. and Zhou, H. (2005). Variable selection for multivariate failure time data. *Biometrika*. **92**, 303-316. (PMCID: PMC2674767)
- 222. Li, R. and Sudjianto, A. (2005). Analysis of computer experiments using penalized likelihood in Gaussian kriging models. *Technometrics*, 47, 111-120.
- 223. Li, R. and Chow, M. (2005). Evaluation of reproducibility for paired functional data. *Journal of Multivariate Analysis.* **93**, 81-101. (PMCID: PMC2674768)
- 224. Li, R. and Marron, J. S. (2005). Local likelihood SiZer map. Sankya. 67, 476-498.
- 225. Fan, J. and Li, R. (2004). New estimation and model selection procedures for semiparametric modeling in longitudinal data analysis. *Journal of American Statistical Association*, 99, 710-723.
- 226. Yi, C., Li, R., Bakwin, P. S., Desai, A., Ricciuto, D. M., Burns, S., Turnipseed, A. A., Munger, J.W., Wofsy, S. C., Wilson, K., Meyers, T. P., Anderson, D. E., and Monson, R. K. (2004). A nonparametric method for separating photosynthesis and respiration components in CO₂ flux measurements. Geophysical Research Letters. 31, L17107, doi:10.1029/2004GL020490
- 227. Li, R., Lin, D. K.J. and Chen, Y. (2004). Uniform design: design, analysis and applications. *International Journal of Material and Product Technology*, **20**, 101-114.
- 228. Li, R. and Lin, D. K. J. (2003). Comparisons of variable selection approaches for analysis of supersatured design, *Journal of Data Science*, **1**. 249-260.
- 229. Fan, J. and Li, R. (2002). Variable selection for Cox's proportional hazards model and frailty model. *The Annals of Statistics*. **30**, 74-99.
- 230. Li, R. and Lin, D. K. J. (2002). Data analysis in supersatured designs, *Statistics and Probability Letters*. **59**, 135-144.
- 231. Li, R. (2002). Model selection for analysis of uniform design and computer experiment.

 International Journal of Reliability, Quality and Safety Engineering. 9, 367-382
- 232. Fan, J. and Li, R. (2001). Variable selection via nonconcave penalized likelihood and its oracle properties. *Journal of American Statistical Association*, **96**. 1348-1360.

- 233. Liang, J. J., Fang, K. T., Hickernell, F. and Li, R. (2001). Testing multivariate uniformity and its applications. *Mathematics of Computation*. **70**, 337-355.
- 234. Cai, Z, Fan, J. and Li, R. (2000). Efficient estimation and inferences for varying-coefficient models. *Journal of American Statistical Association*, **95**, 888-902.
- 235. An, H. Z., Zhu, L. X. and Li, R. (2000). A mixed-type test for linearity in time series. *Journal of Statistical Planning and Inference*, 88, 339-353.
- 236. Liang, J. J., Li, R., Fang, K. T. and Fang, H. B. (2000). Testing multinormality based on low-dimensional projection. *Journal of Statistical Planning and Inference*, **86**, 129-141.
- 237. Fang, K. T. and Li, R. (1999). Bayesian statistical inference on elliptical matrix distributions. Journal of Multivariate Analysis, 70, 66-85.
- 238. Fang, K. T., Li, R. and Liang, J. J. (1998). A multivariate version of Ghosh's MT_3 plot to detect non-multinormality. Computational Statistics and Data Analysis, 28, 371-386.
- 239. Fang, K. T., Li, R. and Zhu, L. X. (1998). A projection NT-type test for elliptical symmetry based on the skewness and kurtosis indices. *Acta Mathematicae Applicatae Sinica (English Series)*, **14**, 314-323.
- 240. Zhu, L. X. and Li. R. (1998). A dimensional-reduction type test for linearity of a stochastic regression model. *Acta Mathematicae Applicatae Sinica (English Series)*, **14**, 165-175.
- 241. Li, R., Fang, K. T. and Zhu, L. X. (1997). Some probability plots to test spherical and elliptical symmetry. *Journal of Computational and Graphical Statistics*, **6**, 435-450.
- 242. Fang, K. T. and Li, R. (1997). Some methods for generating both an NT-net and the uniform distribution on a Stiefel manifold and their applications. *Computational Statistics and Data Analysis*, **24**, 29-46.
- 243. Zhu, L. X., Fang, K. T. and Li. R. (1997). A new approach for testing symmetry of a high-dimensional distribution. *Bulletin of Hong Kong Mathematical Society*, 1, 35-46.
- 244. Li, R. (1997). The expected values of invariant polynomial with matrix argument of elliptical contoured distributions. *Acta Mathematicae Applicatae Sinica (English Series)*, **13**, 64-70.
- 245. Li, R. and Fang, K. T. (1995). Estimation of scale matrix of elliptically contoured matrix distributions. Statistics & Probability Letters, 24, 289-297.
- 246. Fang, K. T. and Li, R. (1995). Estimation of scatter matrix based on i.i.d. sample from elliptical distributions. *Acta Mathematicae Applicatae Sinica (English Series)*, **11**, 405-412.
- 247. Li, R. (1994). The characteristic functions of some subclasses of spherical distributions. Chinese Journal of Applied Probability and Statistics, 10, 290-296.
- 248. Li, R. (1993). The characteristic functions of spherical matrix distributions. Statistics & Probability Letters, 17, 273-279.

249. Li, R. (1992). Some subclasses of spherical matrix distributions. *Journal of Graduate School, Academia Sinica*, **9**, 125-140, (in Chinese).

C. Publication in Refereed Machine Learning Conference Proceedings

- 250. Liu*, S. S., Lin, H., Reimherr, M., and Li, R. (2025). Co-regularization for multi-source knowledge transfer in high dimensions. The Thirty-ninth Annual Conference on Neural Information Processing Systems (NeurIPS 2025). December 2-7, 2025, San Diego, CA.
- 251. Li*, S., Ding*, Y., Xue, L. and Li, R. (2025). Stability and oracle inequalities for optimal transport maps between general distributions. The Thirty-ninth Annual Conference on Neural Information Processing Systems (NeurIPS 2025). December 2-7, 2025, San Diego, CA.
- 252. Yu, X, He*, Z., Sun, Y. Xue, L. and Li, R. (2025). Understanding the Accuracy-Communication Trade-off in Personalized Federated Learning. *The Forty-second International Conference on Machine Learning (ICML2025)*, July 13-19, 2025, Vancouver, Canada.
- 253. Zhang*, L., Hou, Z. Ji, T. Xu, Y. and Li, R. (2025). Post-hoc Interpretability Illumination for Scientific Interaction Discovery. *Conference Proceeding of ICLR 2025 Workshop XAI4Science*. April 27, 2025, Singapore.
- 254. He*, Z., Sun, Y., Liu, J. and Li, R. (2024). TransFusion: Covariate-shift robust transfer learning for high-dimensional regression. Proceedings of the 27th International Conference on Artificial Intelligence and Statistics (AISTATS) 2024, Valencia, Spain. PMLR: Volume 238.

D. Publication as Refereed Book Chapters

- 255. Liu*, W. and Li, R. (2020). Projection test with sparse optimal direction for high-dimensional one-sample mean problem In "Contemporary Experimental Design, Multivariate Analysis and Data Mining" edited by Jianqing Fan and Jianxin Pan, pp. 295-309. Springer, New York.
- 256. Liu*, W. and Li, R. (2020). Variable selection and feature screening. In "Macroeconomic Forecasting in the Era of Big Data", edited by Peter Fuleky. pp. 293-326. Springer, New York.
- 257. Buu, A. and Li, R. (2018). New statistical methods inspired by data collected from alcohol and substance abuse. In *Developmental Perspectives on Alcohol and Other Addictive Behaviors over the Life Span.* Ed. by H. E. Fitzgerald and L. I. Puttler. pp. 354 365.
- 258. Percival, C.J., Kawasaki, K., Huang, Y., Weiss, K., Jabs, E.W., Li, R., Richtsmeier, J.T. (2017). The contribution of angiogenesis to variation in bone development and evolution, in: Percival, C.J., Richtsmeier, J.T. (Eds.), Building Bones: Bone Development and Formation in Anthropology, Cambridge Studies in Biological and Evolutionary Anthropology. Cambridge University Press, Cambridge, UK, pp. 26 51.
- 259. Li, R. and Wang, Z. (2016). Oracle property. An entry at "Wiley StatsRef: Statistics Reference Online" edited by N. Balakrishnan, P. Brandimarte, B. Everitt, G. Molenberghs, F. Ruggeri and W. Piegorsch. Wiley, New York.

- 260. Li, R. and Cui, H. (2012). Variable selection via regularization in *Encyclopedia of Environmetrics*, Second Edition, A.-H. El-Shaarawi and W. Piegorsch (eds). John Wiley & Sons Ltd, Chichester, UK, pp. 2869-2875. DOI: 10.1002/9780470057339.vnn162.
- 261. Kim*, K., Senturk, D. and Li, R. (2011). Recent history functional linear models. in Nonparametric Statistics and Mixture Models: A Festschrift in Honor of Thomas P. Hettmansperger (Eds by D. R. Hunter, D. St. Richards and J. Rosenberger), 169-182. Singapore: World Scientific Publishing Co.
- 262. Zhang*, Y. and Li, R. (2011). Iterative conditional maximization algorithm for nonconcave penalized likelihood. in *Nonparametric Statistics and Mixture Models: A Festschrift in Honor of Thomas P. Hettmansperger* (Eds by D. R. Hunter, D. St. Richards and J. Rosenberger), 336-352. Singapore: World Scientific Publishing Co.
- 263. Li, R. and Ren, J. (2011). An overview on joint modeling of censored survival time and longitudinal data. *Analysis of High-dimensional Data*, (T.T. Cai and X. Shen, eds), 195 220. Beijing: Higher Education Press.
- 264. Dziak*, J., R. Li and Qu, A. (2008). An overview on quadratic inference function approaches for longitudinal data. *New Developments in Biostatistics and Bioinformatics*, (J. Fan, X. Lin and J. Liu, eds). 49-72. World Scientific Publishing Co. Singapore and Higher Education Press, Beijing China.
- 265. Dziak*, J.J. and Li, R. (2007). An overview on variable selection for longitudinal data. *Quantitative Medical Data Analysis using Mathematical Tools and Statistical Techniques*, (D. Hong and Y. Shyr, eds). 3-24. World Sciences Publisher, Singapore.
- 266. Fang, K.-T., Liang, J., Hickernell, F. J. and Li, R. (2006). A stabilized uniform Q-Q plot to detect non-multinormality. Random Walk, Sequential Analysis and Related Topics, A Festschrift in honor of Yuan-Shih Chow, (A. C. Hsiung, Z. Ying and C. Zhang, eds). 254-268. World Sciences Publisher, Singapore.
- 267. Fan, J. and Li, R. (2006). An overview on nonparametric and semiparametric techniques for longitudinal data. In *Frontiers of Statistics* (Fan, J. and Koul, H., eds.). 277-304. Imperial College Press.
- 268. Li, R., Root, T. and Shiffman, S. (2006). A local linear estimation procedure for functional multilevel modeling. In *Models for Intensively Longitudinal Data*, (T. Walls and J. Schafer eds). 63-83, Oxford University Press.
- 269. Li, G., Li, R. and Zhou, M. (2005). Empirical likelihood in survival analysis. In *Contemporary Multivariate Analysis and Experimental Designs*, (J. Fan and G. Li, Eds), 337-349. World Sciences Publisher, Singapore.
- 270. Fan, J., Li, G. and Li, R. (2005). An overview on variable selection for survival data analysis. In Contemporary Multivariate Analysis and Experimental Designs, (J. Fan and G. Li, Eds), 315-336. World Sciences Publisher, Singapore.
- 271. Fan, J. and Li, R. (2003). Local modeling: density and regression smoothing. In *Advanced Medical Statistics*, (Y. Lu and J. Fang, Eds), 885-930, World Sciences Publisher, Singapore.

E. Publication in Automotive Engineering Conference Proceedings

- 272. Zhang, Z., Li, R. and Sudjianto, A. (2007). Modeling computer experiments with multiple responses. SAE Paper, No. 2007-01-1655. April, 2007 in Detroit, Michigan, USA.
- 273. Li, R., Sudjianto, A. and Zhang*, Z. (2005). Modeling computer experiments with functional response. SAE Paper, No. 2005-01-1397. April, 2005 in Detroit, Michigan, USA.
- 274. Li, R. and Sudjianto, A. (2003). Penalized likelihood kriging model for analysis of computer experiments. *Proceedings of 2003 American Society of Mechanical Engineers (ASME) International Design Automation Conference*. DETC2003/DAC-48758. September 2-6, 2003 in Chicago, Illinois, USA.
- 275. Fang, K.T. and Li, R. (2003). Statistical models for space filling designs and optimalities of uniform designs, SAE Paper, No. 2003-01-1213. March 3-6, 2003 in Detriot, Michigan, USA.
- 276. Li, R. (2002). Model selection for analysis of uniform design and computer experiment. Proceeding of the 8th ISSAT International Conference on Reliability and Quality in Design.

Presentations

A. Named/Distinguished Lectures and Plenary/Keynote Speeches

- 1. A novel approach of high dimensional linear hypothesis testing problem. **Plenary speaker**, The 10th International Conference on Statistical Optimization and Learning. Beijing Jiaotong University, Beijing, P.R. China, July 16-17, 2025.
- 2. Statistical inference in high-dimensional linear and generalized linear models. 2025 International Chinese Statistical Association (ICSA) China Conference, Zhuhai, China. **Plenary speaker**. June 28-30, 2025.
- 3. High-dimensional statistical inference. The 13th Annual Meetings of Chinese Society for Probability and Statistics. **Plenary speaker**. November 8-10, 2024.
- 4. Model-free statistical inference on high-dimensional data. **Gregory Chow Lecture**, Joint Xiamen University and Academy of Mathematics and System Sciences, Chinese Academy of Sciences. Beijing, P.R. China, July 22, 2024.
- 5. Model-free statistical inference on high-dimensional data. **Plenary speaker**, The 9th International Conference on Statistical Optimization and Learning. Beijing Jiaotong University, Beijing, P.R. China, July 15-16, 2024.
- A new test for high dimensional two-sample mean problems with consideration of correlation structure. Distinguished Lecture, Department of Statistics, Chinese University of Hong Kong. June 6, 2024.
- 7. Model-free statistical inference on high-dimensional data. Keynote speaker of the Hong Kong University 2024 Summer Workshop on Statistics and Data Analytics. June 3, 2024.

- 8. Tests for large-dimensional shape matrices via M-Estimators. **Science Lecture**, College of Science, Southern University of Science and Technology, China, May 28, 2024.
- 9. Statistical foundational research and future directions. **Distinguished Lecture**, Faculty of Science and Technology, United Independence College, Beijing Normal University and Hong Kong Baptist University. February 20, 2024.
- 10. Tests for large-dimensional shape matrices via M-Estimators. **Plenary speaker**. The 8th International Conference on Statistical Optimization and Learning, Beijing Jiaotong University, Beijing, P.R. China, December 30-31, 2023.
- 11. Feature screening for ultrahigh dimensional data: methods and applications. 2023 International Conference on Data Science and Brain-Inspired Intelligence. Fudan University, Shanghai, P.R. China, December 15-17, 2023,
- 12. Feature screening for ultrahigh dimensional data: methods and applications. IMS Medallion Lecture, Joint Statistical Meetings, Toronto, Canada. August 5-9, 2023,
- 13. Statistical Inference for Linear Mediation Models with High-dimensional Mediators and Application to Studying Stock Reaction to COVID-19 Pandemic. **Plenary speaker**. International Conference on Big Data and Statistical Interdisciplinary Sciences, East China Normal University, Shanghai, P.R. China. July 4 6, 2023.
- 14. Threshold selection in feature screening for error rate control. **Plenary speaker** in Workshop on Frontiers of Statistics and Data Science. Sichuan University, Chengdu, P. R. China, July 2-4, 2023.
- 15. Projection test for mean vector in high dimensions. **Keynote speaker**. The 7th International Conference on Statistical Optimization and Learning. Beijing, P.R. China, December 28-29, 2022.
- To be data scientists or data analysts, how statistics help you get prepared? Plenary Lecture. 2022 Shenzhen International Conference on Frontiers of Statistics and Data Science, Shenzhen, P.R. China, December 3-4, 2022
- 17. Projection test for mean vector in high dimensions. **Plenary speaker**. International Conference on Statistics and Data Science: Theories, Methods and Applications. Zhongnan University of Economics and Law, Wuhan, P.R. China, November 26-27, 2022.
- 18. To be data scientist or data analyst, how statistics can help you? Qunxian Lecture, Graduate School of Xiamen University, P.R. China, November 4, 2022
- 19. Model-free conditional feature screening with false discovery rate control. **Plenary speaker**. International Conference on Frontier of Big Data Statistics, East China Normal University, Shanghai, P.R. China, August 23-24, 2022.
- 20. Feature screening for ultrahigh dimensional data: Methods and Applications. **John A.** Lynch Lecture, College of Science, University of Notre Dame, April 26, 2022.

- 21. Statistical inference for mediation model with high dimensional mediators. **Keynote speaker**. The 6th International Conference on Statistical Optimization and Learning. Beijing, P.R. China, December 18-19, 2021.
- 22. Statistical inference for mediation model with high dimensional mediators. **Keynote speaker**. The 7th Young Statistician Forum at Shanghai University of Finance and Economics. Shanghai, P.R. China, November 27, 2021.
- 23. A new tuning-free robust and efficient approach to high-dimensional regression. **Science Lecture**, College of Science, Southern University of Science and Technology, China, April 15, 2021.
- 24. Rank Lasso in high-dimensional regime and its properties. **Keynote speaker**. The 5th International Conference on Statistical Optimization and Learning. Beijing, P.R. China, December 26-30, 2020
- Statistical inference for high-dimensional data. Distinguished Speaker. The 2019 International Conference on Data Science. Fudan University, Shanghai, P.R. China. December 14-15, 2019.
- 26. Linear Hypothesis testing for High Dimensional Generalized Linear Models. **Keynote speaker**. International Chinese Statistical Association Canada Chapter 2019 Symposium, Queen's University, Kingston, ON, Canada, August 9 11, 2019.
- 27. Ultrahigh dimensional precision matrix estimation via refitted cross validation. **Keynote** speaker. The First EMei Statistical Conference, Emei, Sichuan, July 2-5, 2019.
- 28. Linear Hypothesis testing for High Dimensional Generalized Linear Models. **Plenary speaker**. The 2019 Statistical Alumni Forum, Beijing Normal University, June 28-30, 2019.
- 29. Linear Hypothesis testing for High Dimensional Generalized Linear Models. **Plenary speaker**. International Workshop on Frontier Statistical Research, XiAn Jiaotong University, June 25-27, 2019.
- 30. Ultrahigh dimensional precision matrix estimation via refitted cross validation and application to portfolio optimization. **Keynote speaker**. Symposium on Recent Development of Econometrics, Capital University of Economics and Business, June 10, 2019.
- 31. Test of Significance for High-Dimensional Longitudinal Data. **Keynote speaker** International workshop on Statistical Foundation of Big Data Analysis, Northeastern Normal University, May 21, 2019.
- 32. Linear Hypothesis testing for High Dimensional Generalized Linear Models. **Keynote speaker**. 2018 Workshop on Statistics and Data Science, Sichuan University, July 7-8, 2018.
- 33. Spurious Correlation and its Impact on Estimation of Ultrahigh Dimensional Nonparametric Regression models. **Peter Hall Memorial Lecture**. The 2018 Conference of International Society of Nonparametric Statistics (ISNPS). Salerno, Italy, June 12-15, 2018.

- 34. Error Variance Estimation in Ultrahigh Dimensional Regression Models. **Plenary speaker**, International Workshop on Big Data Science, Zhongnan University of Economics and Law, December 16-17, 2017.
- 35. Error Variance Estimation in Ultrahigh Dimensional Regression Models. **Keynote speaker**, International Workshop on Modern Statistics, Xiamen University, December 9-10, 2017.
- 36. Hypothesis Testing on Linear Structures of High Dimensional Covariance Matrix. **Keynote speaker**, The 2017 Fudan Conference on Big Data Statistics and FinTech, October 29 30, 2017.
- 37. Error Variance Estimation in Ultrahigh Dimensional Regression Models. **Plenary speaker**, The 6th China Statistics Annual Conference. Beijing October 29-30, 2016.
- 38. Projection Test for High-Dimensional Mean Vectors with Optimal Direction. **Plenary speaker**, of Symposium on Frontiers of Statistics and Data Science. The Hong Kong Polytechnic University. June 25-27, 2016.
- 39. Computational Issues Related to Big Data Analysis. **Plenary speaker** of R-Language Conference 2016, Beijing, May 27-29, 2016,
- 40. Error Variance Estimation in Ultrahigh Dimensional Additive Models. **Keynote speaker** of Spring Conference of Korean Statistical Society, Korea. May 21-22, 2016,
- 41. Global Solutions to Folded Concave Penalized nonconvex Learning. **Plenary Speaker** for International Workshop on Optimization Methods and Applications in Big Data. Kaifeng, P. R. China, May 13 15, 2016.
- 42. Projection Test for High-Dimensional Mean Vectors with Optimal Direction. **Pillai Lecture**, Department of Statistics, Purdue University, April 8, 2016.
- 43. Frontier Research in Statistics. **Plenary Speaker** for International Workshop on Data Science and Big Data Research, Renmin University of China, Beijing, P.R. China, December 20, 2015.
- 44. Big Data: Applications and Statistical Analytic Tools, **Distinguished Lecture**, Division of Science and Technology, United International College, Beijing Normal University and Hong Kong Baptist University, October 28, 2015.
- 45. Global Solutions to Folded Concave Penalized nonconvex Learning. **Plenary Speaker** for International Workshop on Big Data Analysis, Capital University of Economics and Business, P.R. China, October 24, 2015.
- 46. Big Data: Applications and Statistical Analytic Tools, **University-wide Public Lecture** organized by Graduate School, Capital University of Economic and Business. October 23, 2015.
- 47. Projection Test for High-Dimensional Mean Vectors with Optimal Direction. **Plenary Speaker** for The International Workshop on Statistical Analytic and Applications of Big Data, Wuhan, P.R. China, October 15 17, 2015.

- 48. Big Data: Applications and Statistical Analytic Tools, Huada Forum (University Named) Lecture, Graduate School, Central China Normal University. October 14, 2015.
- 49. A high-dimensional nonparametric multivariate test for mean vector. **Nanqiang Lecture**, Xiamen University, December 2014.
- 50. Model-free feature screening for ultrahigh dimensional discriminant analysis. **Plenary Speaker** for The First International Conference on Big Data & Applied Statistics, Beijing, P.R. China, November 28-30, 2014.
- 51. Feature screening for ultrahigh dimensional data. **Distinguished Lecture** in the 3rd IMS-APRM, Taipei, Taiwan, July 2014.
- 52. Feature selection for varying coefficient models with ultrahigh dimensional covariates. The only **Keynote Speaker** of "Workshop on Biostatistics and Bioinformatics". Georgia State University. May 10-12, 2013.

B. Invited talks at professional conferences and meetings

- 53. How can statistics help students prepare for better-paid jobs? Statistics in the Age of AI. The George Washington University, May 9-11, 2024.
- 54. Feature-splitting algorithms for ultrahigh dimensional quantile regression. 2024 Kansas Econometrics Workshop. University of Kansas. April 27, 2024.
- 55. Model-free conditional feature screening with FDR control. Joint Conference on Statistics and Data Science in China. Beijing, P.R. China, July 10-13, 2023.
- 56. Testing the effects of high-dimensional covariates via aggregating cumulative covariances. 2022 International Symposium on Modern Data Science Application, Practice and Theory. Yale University, November 19-20, 2022.
- 57. Statistical Inference for linear mediation models with high-dimensional mediators. Joint Statistical Meetings 2022, August 7-11, 2022. Washington DC.
- 58. Statistical Inference for Linear Mediation Models with High-dimensional Mediators. ASA Section of Quality & Productivity Research Conference, 2021. Florida State University.
- 59. Statistical Inference for Linear Mediation Models with High-dimensional Mediators. The 10th World Congress in Probability and Statistics, July 19-23, 2021. Seoul, Korea. Virtual.
- 60. Statistical Inference for Linear Mediation Models with High-dimensional Mediators. The 63rd ISI World Statistics Congress, July 11-16, 2021. Virtual.
- 61. A new tuning-free Robust and Efficient approach to high-dimensional regression. The 2020 Annual Meeting of International Consortium of Chinese Mathematicians, Hefei, P.R. China, December 27 29, 2020
- 62. A new tuning-free robust and efficient approach to high-dimensional regression. Xi'An Statistical Forum, September 23, 2020.

- 63. A new tuning-free robust and efficient approach to high-dimensional regression. JSM2020, August 2-6, 2020.
- 64. Statistical Inference for High-Dimensional Models via Recursive Online-Score Estimation, "Recent Progress in Foundational Data Science", University of Minnesota, September 16-17, 2019.
- 65. Statistical Inference for High-Dimensional Models via Recursive Online-Score Estimation, JSM 2019, Denver, July 27- August 1, 2019.
- 66. Linear Hypothesis testing for High Dimensional Generalized Linear Models. ENAR 2019, Philadelphia, March 25-27, 2019.
- 67. Variable selection via partial correlation. JSM2018, Vancouver, Canada. August 2018
- 68. Test of Significance for High-Dimensional Longitudinal Data. Workshop in semi/nonparametrically Statistical Learning 2018, School of Statistics, Southwestern University of Finance and Economic. June 6-12, 2018.
- 69. An empirical likelihood approach for testing high dimensional mean vector, ICSA-China, Qingdao, P.R. China, June 2-5, 2018.
- 70. Linear Hypothesis testing for High Dimensional Generalized Linear Models. IMS-APRM 2018, Singapore, June 26-29, 2018.
- 71. Hypothesis testing on linear structures of large dimensional covariance matrix. ENAR2018, March 25 28, 2018.
- 72. Error variance estimation in ultrahigh dimensional regression models. JSM2017, Baltimore, July 29 August 3, 2017.
- 73. Hypothesis testing on linear structures of high dimensional covariance matrix. IMS-China, Nanning, China, June 28-July 2, 2017
- 74. Tests for high-dimensional mean vectors. 45-minute invited talk at International Congress of Chinese Mathematicians. Beijing, China, August 2016.
- 75. Projection test for high-dimensional mean vectors with optimal direction. JSM2016, Chicago, August 2016.
- Global Solutions to Folded Concave Penalized nonconvex Learning. Recent advances in Highdimensional Statistical Analysis. Hong Kong University of Science and Technology, June 26, 2016.
- 77. Asymptotic behavior of partial likelihood and its application to variable selection. IMS-APRM 2016, Hong Kong, June 27-30, 2016.
- 78. Hypothesis Testing on Linear Structures of High Dimensional Covariance Matrix. International Workshop on Recent Advances on High-Dimensional Statistical Inference. Peking University, May 17-18, 2016.

- 79. Feature screening in ultrahigh dimensional Cox's model. ENAR 2016, Austin, March 2016
- 80. A high-dimensional nonparametric multivariate test for mean vector. The 5th IMS-China conference on Statistics and Probability. Kunming, P. R. China, July 1-4, 2015.
- 81. Projection Test for High-Dimensional Mean Vectors with Optimal Direction. The 10th International Workshop on Frontier of Statistics, Beijing, P.R. China, June 25-26, 2015.
- 82. Joint likelihood estimation for joint modeling survival and multiple longitudinal processes. The 24th International Workshop on Matrices and Statistics, Haikou, Hainan, China. May 2015.
- 83. Joint likelihood estimation for joint modeling survival and multiple longitudinal processes.

 The 2015 Rao Prize Conference, Pennsylvania State University, University Park, May 2015
- 84. Robust feature screening and selection for ultrahigh dimensional heteroscedastic single-index models. Joint Statistical Meetings 2014, Boston, August 2014
- 85. Calibrating nonconvex penalized regression in ultrahigh dimension, The Second Taihu International Statistics Forum, Suzhou, P.R. China, July 6-8, 2013.
- 86. Nonparametric mixture regression. The 8th International Workshop on Frontier of Statistics, Beijing, P.R. China, June 28-29, 2013.
- 87. Time-varying coefficient models for longitudinal mixed responses. ENAR2013, Orlando, March 2013.
- 88. Calibrating nonconvex penalized regression in ultrahigh dimension. The 3rd Princeton Statistics Day, Princeton University, Oct. 2012.
- 89. Penalized quantile regression for in ultra-high dimensional data. International Workshop on Meeting the Challenges of High Dimension, National University of Singapore. August, 2012.
- 90. New estimation procedure for nonparametric regression function of longitudinal data. The 2012 International Forum on Modern Statistics and Econometrics. Xiamen University, P.R. China, July 2012.
- 91. Variable selection for linear mixed effect models. The 2nd IMS-APRM 2012, Japan, July 2012.
- 92. Feature screening via distance correlation learning, Workshop on "Large scale statistical inference and learning", University of Minnesota, April 2012.
- 93. Feature screening via distance correlation learning, ENAR 2012, Washington DC, April 2012.
- 94. New statistical models and techniques for analyzing ecological momentary assessment (EMA) Data. Society for Research on Nicotine and Tobacco Pre-Conference Workshop on "New Methods for Advancing Research on Tobacco Dependence". Houston, Texas, March 13, 2012.
- 95. Sparse quantile regression approach for analyzing heterogeneity in ultrahigh dimension. JSM11, Miami, Florida, August 2011

- 96. Sparse quantile regression approach for analyzing heterogeneity in ultrahigh dimension. First Wu Xi International Statistics Forum. Wuxi, P.R. China, July 2011.
- 97. Feature screening via distance correlation learning. Research Symposium on Frontiers of Statistics, Hefei, P.R. China, July 2011.
- 98. Model free feature screening for ultra high-dimensional data. JSM10, Vancouver, Canada, August 2010.
- 99. Variable selection for partially linear measurement error models. JSM09, Washington DC, August 2009.
- 100. Regularization parameter selections via generalized information criterion. Spring Research Conference, Vancouver, Canada, May 2009.
- Weighted Wilcoxon-type smoothly clipped absolute deviation method. IMS-China conference. Hangzhou, P.R.China, June 2008.
- Regularization parameter selections for penalized likelihood functions of GLIM and Cox models. ENAR08, Washington DC, March 2008.
- Local composite quantile regression. SIAM reginal conference, University of Central Florida, Orlando, March 2008.
- 104. Variable selection in semiparametric modeling. JSM07, Salt Lake City, August 2007.
- 105. An overview on variable selection for longitudinal data, International Chinese Statistical Association Applied Statistics Symposium 2007, Raleigh, NC, June 2007.
- 106. Analysis of longitudinal data with semiparametric estimation of covariance function. JSM06, Seattle, August 2006.
- 107. Analysis of longitudinal data with semiparametric estimation of covariance function. Conference on "Nonparametric Models for Complex Biological Data" University of California, Davis, August, 2005.
- 108. Partially nonlinear model and its application, JSM 2005, Minneapolis, Minnesota, August, 2005.
- 109. Variable selection in semiparametric regression modeling. Workshop on "Frontier Statistics" Institute of Applied Mathematics, Chinese Academy of Sciences, Beijing, July 2005.
- 110. Modeling computer experiments with functional response, Society of Automobile Engineering 2005 congress, Detroit, MI, April 2005.
- 111. Model selection for multivariate failure data, ENAR 2005, Austin Texas, March, 2005.
- 112. Variable selection for survival data analysis, JSM 2004, Toronto, Canada, August, 2004.
- 113. Evaluation of reproducibility for paired functional data. International Conference of International Chinese Statistical Association, Singapore, July 2004.

- 114. Models and methods for analysis of intensively collected data. ENAR 2004, Spring meeting, Pittsburgh, PA, March, 2004
- 115. Analysis of EMA data via local polynomial regression. Workshop on Models for Intensive Longitudinal Data and Functional Data, McGill University, Oct. 11-12, 2003.
- 116. Variable selection and nonparametric goodness of fit test in function data analysis. ENAR 2003 Spring meeting, Tampa, FL, April 2003.
- 117. Statistical models for space filling designs and optimality of uniform design. The Society of Automotive Engineers 2003 world congress. Detroit, MI, March, 2003.
- 118. Model selection for analysis of uniform design and computer experimental design. The the 8th ISSAT International Conference on Reliability and Quality in Design, Anaheim, CA, August, 2002.
- 119. Variable selection via nonconcave penalized likelihood and its oracle properties. Joint Statistical Meeting (JSM2001). Atlanta, GA, August, 2001.
- Uniform Designs: Theory and Application. Spring Research Conference 2001. Roanoke, VA, June, 2001.
- 121. Model selection in biostatistical modeling via penalized likelihood method. International Chinese Statistical Association (ICSA) 2000 Applied Statistics Symposium, New Jersey, June 2000.

C. Invited talks at departmental colloquia and seminar

- 122. A novel approach of high dimensional linear hypothesis testing problem. Department of School of Mathematical and Statistical Science, Clemson University, October 3, 2025.
- 123. Model-free statistical inference on high-dimensional data. School of Data Science, Chinese University of Hong Kong in Shenzhen, November 22, 2024.
- 124. A new test for high dimensional two-sample mean problems with consideration of correlation structure. School of Mathematics, Xian Jiaotong University, November 20, 2024.
- 125. Model-free statistical inference on high-dimensional data. Department of Probability and Statistics, Peking University, November 17, 2024.
- 126. Model-free statistical inference on high-dimensional data. School of Statistics and Data Science, Southeastern University, November 14, 2024.
- 127. Model-free statistical inference on high-dimensional data. Department of Statistics, University of Science and Technology of China, November 13, 2024.
- 128. A New Test for high dimensional two-sample mean problems with consideration of correlation structure. School of Statistics, Beijing Normal University, November 6, 2024.
- 129. Testing high-dimensional regression coefficients in linear models. Renmin University of China. November 5, 2024.

- 130. Model-free statistical inference on high-dimensional data. Department of Statistics, University of Michigan, October 4, 2024.
- 131. Model-free statistical inference on high-dimensional data. School of Statistics, Beijing Normal University, August 2, 2024.
- 132. A new test for high dimensional two-sample mean problems with consideration of correlation structure. School of Business, Hong Kong University, May 29, 2024.
- 133. A new test for high dimensional two-sample mean problems with consideration of correlation structure. School of Mathematics, Shanghai Jiaotong University, March 19, 2024.
- 134. Tests for large-dimensional shape matrices via M-estimators. School of Management, Fudan University, March 18, 2024.
- 135. A new test for high dimensional two-sample mean problems with consideration of correlation structure. School of Data Science, Fudan University, March 18, 2024.
- 136. A new test for high dimensional two-sample mean problems with consideration of correlation structure. School of Mathematics, Jilin University, March 15, 2024.
- 137. Tests for large-dimensional shape matrices via M-estimators. School of Mathematics, North-eastern Normal University, March 15, 2024.
- 138. Tests for large-dimensional shape matrices via M-estimators. School of Statistics and Data Science, Nankai University, March 13, 2024.
- 139. A new test for high dimensional two-sample mean problems with consideration of correlation structure. Department of Statistics and Finance, University of Science and Technology of China, February 28, 2024.
- 140. A new test for high dimensional two-sample mean problems with consideration of correlation structure. Department of Statistics, Yunnan University, February 26, 2024.
- 141. To be data scientists or data analysts, how statistics help you get prepared? Beijing Information Science and Technology University, December 28, 2023.
- 142. Feature-splitting algorithms for ultrahigh dimensional quantile regression. Institute of Big Data and Statistics, Renmin University of China, December 20, 2023.
- 143. Tests for large-dimensional shape matrices via M-estimators. School of Statistics, Beijing Normal University, December 18, 2023.
- 144. Projection test for mean vector in high dimensions. School of Statistics, Beijing Normal University, July 10, 2023.
- 145. Projection test for mean vector in high dimensions. Institute of Big Data and Statistics, Renmin University of China, July 10, 2023.
- 146. Model-free conditional feature screening with false discovery rate control. School of Statistics and Management Science, Shanghai University of Finance and Economics, July 7, 2023

- 147. Statistical inference for linear mediation models with high-dimensional mediators and application to studying stock reaction to COVID-19 pandemic. School of Statistics and Data Science, Nankai University. June 30, 2023.
- 148. Projection test for mean vector in high dimensions. School of Statistics and Management Science, Shanghai University of Finance and Economic, December 14, 2022.
- 149. Model-free conditional feature screening with false discovery rate control. Department of Statistics and Actuarial Science, The University of Iowa, September 8, 2022.
- 150. A distribution-free conditional independence test with applications to causal discovery. School of Mathematics and Statistics, Northeastern Normal University, July 28, 2022.
- 151. Feature screening for ultrahigh dimensional data: Methods and Applications. School of Statistics and Information, Shanghai University of International Business and Economics. June 20, 2022.
- 152. Statistical inference for linear mediation models with high-dimensional mediators. Institute of Statistics and Big Data, Renmin University of China, May 13, 2022.
- 153. Statistical inference for linear mediation models with high-dimensional mediators. Department of Mathematics and Statistics, University of Calgary, Canada, April 29, 2022.
- 154. Statistical inference for linear mediation models with high-dimensional mediators. Department of Applied and Computational Mathematics and Statistics, University of Notre Dame, April 25, 2022.
- 155. Statistical inference for linear mediation models with high-dimensional mediators. Department of Statistics, University of Science and Technology of China, April 7, 2022.
- 156. A distribution free conditional independence test with applications to causal discovery, Department of Economics, University of California at San Diego, November 16, 2021.
- 157. Linear Hypothesis Testing in Linear Models with High Dimensional Responses. Institute of Interdisciplinary Research, East China Normal University, July 27, 2021
- 158. A new tuning-free robust and efficient approach to high-dimensional regression. Department of Biostatistics, University of Michigan, April 8, 2021.
- 159. A distribution free conditional independence test with applications to causal discovery, Department of Statistics, UIUC, February 18, 2021
- 160. Big data: applications and statistical analytic tools. Beijing Information Science and Technology University, December 26, 2020.
- 161. Statistical inference for high-dimensional models via recursive online-score estimation. Shanghai University of Finance and Economics, December 17, 2020.
- 162. A new tuning-free robust and efficient approach to high-dimensional regression. Northeastern Normal University, October 17, 2020.

- 163. A new tuning-free robust and efficient approach to high-dimensional regression. University of Geneva, October 2, 2020.
- 164. A new tuning-free approach to high-dimensional regression. Yunan University, September 3, 2020.
- 165. A new tuning-free approach to high-dimensional regression. Xiamen University, July 3, 2020.
- 166. A new tuning-free approach to high-dimensional regression. Southwestern University of Finance and Economics, June 15, 2020.
- 167. Test of High Dimensional Mean Vector, Institute of Applied Mathematics, Chinese Academy of Sciences, December 23, 2019.
- 168. Hypothesis Testing on Linear Structures of High Dimensional Covariance Matrix. Center for Statistics Study, Southwest University of Finance and Economics, July 5, 2019.
- Linear Hypothesis testing for High Dimensional Generalized Linear Models. Center for Statistics. Tsinghua University, June 17, 2019.
- 170. Ultrahigh Dimensional Precision Matrix Estimation via Refitted Cross Validation and Application to Asset Allocation. Capital Normal University, June 13, 2019.
- 171. Linear Hypothesis testing for High Dimensional Generalized Linear Models. Institute of Big Data and Statistics. Renmin University, June 12, 2019.
- 172. Statistical inference for high-dimensional models via recursive online-score estimation. School of Data Science, Fudan University. June 5, 2019.
- 173. Linear hypothesis testing for high dimensional generalized linear models. New York University in Shanghai, June 4, 2019
- 174. Statistical inference for high-dimensional models via recursive online-score estimation. Institute of Applied Mathematics, Chinese Academy of Sciences. October 12, 2018.
- 175. Statistical inference for high-dimensional models via recursive online-score estimation. Renmin University of China. October 11, 2018.
- 176. Linear hypothesis testing for high dimensional generalized linear models. Northeastern Normal University, P.R. China, October 9, 2018.
- 177. Linear hypothesis testing for high dimensional generalized linear models. Guangzhou University, P.R. China, June 28, 2018.
- 178. Linear hypothesis testing for high dimensional generalized linear models. Jinan University, P.R. China, June 28, 2018.
- 179. Testing of significance for high-dimensional longitudinal data. Chinese Academy of Sciences, P.R. China, June 5, 2018.
- 180. Testing of significance for high-dimensional longitudinal data. Department of Biostatistics, Columbia University, April 26, 2018.

- 181. Linear hypothesis testing for high dimensional generalized linear models. School of Statistics, Shanghai University of Finance and Economics, P.R. China, December 19, 2017.
- 182. Linear hypothesis testing for high dimensional generalized linear models. East China Normal University, Shanghai. December 18, 2017
- 183. Statistical Inference for high dimensional generalized linear models. Institute of Applied Mathematics, Chinese Academy of Sciences, Beijing. December 8, 2017
- 184. Variable Selection via Partial Correlation, Renmin University of China, November 3, 2017.
- Variable Selection via Partial Correlation, Chinese Academy of Sciences, P.R. China, November 2, 2017.
- Projection correlation between two random vectors. Capital Normal University, P.R. China, November 1, 2017.
- 187. Projection correlation between two random vectors. Northeastern Normal University, P.R. China, November 1, 2017.
- 188. Projection correlation between two random vectors. Beijing Normal University, P.R. China, October 13, 2017.
- 189. Projection correlation between two random vectors. Chinese Academy of Sciences, P.R. China, July 14, 2017.
- 190. Hypothesis Testing on Linear Structures of High Dimensional Covariance Matrix. Beijing Normal University, July 12, 2017.
- 191. Error Variance Estimation in Ultrahigh Dimensional Additive Models. School of Statistics, Shanghai University of Finance and Economics, P.R. China, July 4, 2017.
- 192. Spurious correlation and its impact on error variance estimation. CTSI BERD, Penn State University, April 25, 2017.
- 193. Projection Test for High-Dimensional Mean Vectors with Optimal Direction. Georgia Institute of Technology, April 12, 2017.
- 194. Hypothesis Testing on Linear Structures of High Dimensional Covariance Matrix. Department of Statistics, Columbia University. March 27, 2017.
- 195. Statistical methods for high dimensional data and their applications to social behavioral sciences. February 16, 2017, The Methodology Center, Penn State University.
- 196. Error Variance Estimation in Ultrahigh Dimensional Additive Models. Institute of Statistics. Nankai University, P.R. China, November 1, 2016.
- 197. Error Variance Estimation in Ultrahigh Dimensional Regression Models. Northeastern Normal University, P.R. China, October 31, 2016
- 198. Global Solutions to Folded Concave Penalized nonconvex Learning. Tsinghua University, October 27, 2016.

- 199. Hypothesis testing on linear structures of high dimensional covariance matrix, Chinese Academy of Sciences, P.R. China, October 27, 2016.
- 200. Error Variance Estimation in Ultrahigh Dimensional Additive Models. Institute of Statistics and Big Data. Renmin University, P.R. China, May 30, 2016.
- Error Variance Estimation in Ultrahigh Dimensional Additive Models. School of Statistics.
 Beijing Normal University, P.R. China, May 26, 2016.
- 202. Error Variance Estimation in Ultrahigh Dimensional Additive Models. Institute of Applied Mathematics. Chinese Academy of Sciences, P.R. China, May 16, 2016.
- 203. Hypothesis Testing on Linear Structures of High Dimensional Covariance Matrix. Department of Statistics, University of California at Davis. May 5, 2016.
- 204. Hypothesis Testing on Linear Structures of High Dimensional Covariance Matrix. Department of Statistics, University of Chicago. April 17, 2016.
- 205. Joint Likelihood Estimation for Joint Modeling Survival and Multiple Longitudinal Processes. Institute of Applied Mathematics. Chinese Academy of Sciences, P.R. China, December 21, 2015.
- 206. Global Solutions to Folded Concave Penalized nonconvex Learning. Department of Statistics, University of Science and Technology of China, P.R. China, December 18, 2015.
- 207. Global Solutions to Folded Concave Penalized nonconvex Learning. School of Statistics, Shanghai University of Finance and Economics, P.R. China, December 16, 2015.
- Projection Test for High-Dimensional Mean Vectors with Optimal Direction. School of Statistics, Beijing Normal University, P.R. China, December 15, 2015.
- 209. Projection Test for High-Dimensional Mean Vectors with Optimal Direction. Institute of Statistics, Nankai University, P.R. China, November 4, 2015.
- 210. Projection Test for High-Dimensional Mean Vectors with Optimal Direction. School of Mathematics and Informational Sciences, Guangzhou University, P.R. China, October 29, 2015.
- 211. Projection Test for High-Dimensional Mean Vectors with Optimal Direction. Institute of Applied Mathematics, Chinese Academy of Sciences, P.R. China, October 23, 2015.
- Big Data: Applications and Statistical Analytical Tools. Shenyang University of Technology,
 P.R. China Oct. 21, 2015
- 213. Global Solutions to Folded Concave Penalized nonconvex Learning. School of Mathematics, Northeastern Normal University, P.R. China, October 18, 2015.
- 214. Projection Test for High-Dimensional Mean Vectors with Optimal Direction. Institute of Big Data and Statistics, Renmin University, P.R. China, October 13, 2015.
- 215. Joint likelihood estimation for joint modeling survival and multiple longitudinal processes. Department of Public Health Sciences, The Pennsylvania State University, September, 2015.

- 216. Projection Test for High-Dimensional Mean Vectors with Optimal Direction. Department of Statistics, University of South Carolina, September 2015.
- 217. Model-Free Feature Screening for Ultrahigh Dimensional Discriminant Analysis. Center for Applied Statistics, Huaqiao University. July 2015.
- 218. A high-dimensional nonparametric multivariate test for mean vector. School of Statistics. Capital University of Economics and Business, June 2015.
- 219. Model-Free Feature Screening for Ultrahigh Dimensional Discriminant Analysis. School of Statistics, Beijing Normal University. June 2015.
- 220. A high-dimensional nonparametric multivariate test for mean vector. Department of Statistics. Jinan University. May 2015.
- Feature screening in ultrahigh dimensional Cox's model. Institute of Statistics, Nankai University, May 2015.
- 222. A high-dimensional nonparametric multivariate test for mean vector. Department of Statistics. Beijing Normal University. December 2014.
- 223. A high-dimensional nonparametric multivariate test for mean vector. Institute of Applied Mathematics, Chinese Academy of Sciences, November 2014.
- 224. A high-dimensional nonparametric multivariate test for mean vector. Institute of Statistics, Nankai University, November 2014.
- 225. A high-dimensional nonparametric multivariate test for mean vector. Department of Statistics, University of Wisconsin at Madison. September 2014.
- 226. Model-Free Feature Screening for Ultrahigh Dimensional Discriminant Analysis. School of Statistics, Capital Economics and Trade University. July 2014
- 227. Model-Free Feature Screening for Ultrahigh Dimensional Discriminant Analysis. Institute of Applied Mathematics, Chinese Academy of Sciences. July 2014
- 228. Feature selection for varying coefficient models with ultrahigh dimensional covariates. Institute of Statistics, Nankai University. July 2014.
- 229. Feature Selection in Ultrahigh Dimensional Data Analysis. Department of Statistics. Jinan University. June 2014.
- 230. Feature selection for varying coefficient models with ultrahigh dimensional covariates. Department of Statistics, University of Michigan. April 2014.
- 231. Statistical models and techniques for analyzing intensive longitudinal data. Department of Psychiatry, University of Michigan. April 2014.
- 232. Feature selection for varying coefficient models with ultrahigh dimensional covariates. University of Georgia. November 2013.

- 233. Feature selection for varying coefficient models with ultrahigh dimensional covariates. University of Chicago. October 2013.
- 234. Feature selection for varying coefficient models with ultrahigh dimensional covariates. Florida State University. October 2013.
- 235. Feature selection for varying coefficient models with ultrahigh dimensional covariates. University of Pennsylvania. October 2013.
- 236. Feature selection for varying coefficient models with ultrahigh dimensional covariates. University of California at Riverside. May 2013.
- 237. Feature screening for ultrahigh dimension data. Department of Biostatistics, Yale University. April, 2013.
- 238. Feature screening for ultrahigh dimension data. Department of Statistics, Columbia University. April, 2013.
- 239. Feature screening for ultrahigh dimension data. Department of Biostatistics, Harvard University. February, 2013.
- 240. Feature screening for ultrahigh dimension data. Department of Information and Operations Management, University of Southern California, December 2012.
- 241. Penalized quantile regression for in ultra-high dimensional data. University of Illinois at Chicago, December 2012.
- 242. Penalized quantile regression for in ultra-high dimensional data. University of Maryland at College Park, November 2012.
- 243. Feature screening via distance correlation learning. School of Industrial and Systems Engineering, Georgia Institute of Technology, September 2012.
- 244. Feature screening via distance correlation learning. Department of Statistics, North Carolina State University, September 2012.
- 245. Nonparametric mixture of regression models. Beijing Normal University, July 2012.
- 246. Variable selection in linear mixed effect models. Beijing Normal University, July 2012
- 247. Variable selection in linear mixed effect models. Shanghai University of Finance and Economics, July 2012.
- 248. Feature screening via distance correlation learning. Shanghai University of Finance and Economics, July 2012.
- 249. Varying-coefficient models for data with auto-correlated error process. Institute of Applied Mathematics, Chinese Academy of Sciences, June 2012.
- 250. New local estimation procedure for nonparametric regression function of longitudinal data. Institute of Applied Mathematics, Chinese Academy of Sciences, June 2012.

- 251. Nonparametric mixture of regression models. Institute of Applied Mathematics, Chinese Academy of Sciences, June 2012.
- 252. Feature screening via distance correlation learning. Department of Statistics Northwestern University, May 2012.
- 253. Feature screening via distance correlation learning. Department of Operation Research and Financial Engineering, Princeton University, November, 2011.
- 254. Feature screening via distance correlation learning. Department of Statistics, Temple University, September, 2011.
- 255. Feature screening for ultrahigh dimensional data. The Wang Yanan Institute for Studies in Economics, Xiamen University, P.R. China, July, 2011.
- 256. Model free feature screening for ultra high-dimensional data. Department of Statistics, University of Wisconsin at Madison. October 2010.
- 257. Variable selection for measurement error data. Department of Biostatistics, Columbia University, April 2009.
- 258. Regularization Parameter Selections via Generalized Information Criterion. Department of Statistics, North Carolina State University, April 2009.
- 259. Local composite quantile regression. School of Industrial Engineering, Georgia Tech., Feb. 2009.
- 260. One-step sparse estimates in nonconcave penalized likelihood models. Institute of Applied Mathematics, The Chinese Academy of Sciences, Beijing, June 2008.
- 261. Efficient Statistical Inference Procedures for Partially Nonlinear Models and their Applications. Department of Mathematics, Shanghai Normal University. June 2008.
- 262. Efficient Statistical Inference Procedures for Partially Nonlinear Models and their Applications. Department of Statistics, Shanghai Financial and Economic University. June 2008.
- 263. One-step sparse estimates in nonconcave penalized likelihood models, Department of Statistics, The University of Illinois at Urbana-Champaign. March 2008
- 264. Variable selection in semiparametric modeling. Department of Statistics, University of Minnesota. November, 2007.
- 265. Variable selection in semiparametric modeling. Fred Hutchinson Cancer Research Center. October 2007.
- 266. One-step sparse estimates in nonconcave penalized likelihood models, Department of Statistics, Iowa State University. October 2007
- 267. Tuning parameter selection for nonconvex penalized least squares approach. Department of Epidemiology and Public Health, Yale University. September 2007.

- 268. Tuning parameter selection for nonconvex penalized least squares approach. Department of Biostatistics, University of North Carolina at Chapel Hill. September 2007.
- 269. Variable selection in semiparametric modeling. Department of Statistics, School of Mathematics, Beijing Normal University, May 2007.
- 270. Analysis of longitudinal data with semiparametric estimation of covariance function. Institute of Applied Mathematics, The Chinese Academy of Sciences, Beijing, May 2007.
- 271. Variable selection in semiparametric modeling. Department of Business Statistics and Econometrics, Guanghua School of Management, Peking University, May, 2007.
- 272. Variable selection in semiparametric modeling. United International College of Beijing Normal University and Hong Kong Baptist University, May, 2007.
- 273. Variable selection in semiparametric modeling. School of Mathematics, University of Manchester, May, 2007.
- 274. Analysis of longitudinal data with semiparametric estimation of covariance function. Institute of Mathematics, Statistics and Acturial Science, University of Kent at Canterbury. April, 2007
- 275. Variable selection in semiparametric modeling. Department of Statistics. University of Missouri, December, 2006.
- 276. Analysis of longitudinal data with semiparametric estimation of covariance function. Department of Biostatistics and Epidemiology, University of Pennsylvania November, 2006.
- 277. Analysis of longitudinal data with semiparametric estimation of covariance function. Dept. of Health Evaluation Sciences, Penn State University. November, 2006
- 278. Variable selection in semiparametric modeling. Department of Statistics. Purdue University, April, 2006.
- 279. Variable selection in semiparametric modeling. Department of Mathematics and Statistics. York University, November, 2005.
- 280. Variable selection for high-dimensional data. Department of Statistics, Colorado State University. September 2005.
- 281. Variable selection for high-dimensional data. Department of Statistics, Texas A & M University. March 2005.
- 282. Partially nonlinear models and their applications. Department of Statistics, Chinese University of Hong Kong. May 2004.
- 283. Variable selection for semiparametric regression models. Department of Mathematics, Hong Kong Baptist University. May 2004.
- 284. Screening important variables for analysis of computer experiments, Ford Motor Company, July, 2003.

- 285. Variable selection via nonconcave penalized likelihood and its oracle properties. Development and Research Lab, General Motor Company, May, 2003.
- 286. Penalized likelihood kriging model for analysis of computer experiments. Development and Research Lab, General Motor Company, May, 2003.
- 287. Variable selection and nonparametric goodness of fit in longitudinal data analysis. Division of Epidemiology, Statistics and Prevention Research, National Institute of Child Health and Human Development, NIH. May 2003.
- 288. Variable selection in survival data analysis. Department of Mathematics, University of North Carolina at Charlotte. April 2003.
- 289. Semiparametric models for longitudinal data analysis: estimation, variable selection and non-parametric goodness-of-fit. Department of Statistics, Harvard University October 2002.
- 290. Model selection for semiparametric modeling in longitudinal data analysis. Department of Biostatistics, University of Pittsburgh. October, 2002.
- 291. Model selection for analysis of uniform design and computer experimental design. Ford Motor Company, August, 2002.
- 292. Semiparametric models for longitudinal data analysis: estimation, variable selection and non-parametric goodness-of-fit. Department of Statistics, Oregon State University. July, 2002.
- 293. Semiparametric models for longitudinal data analysis: estimation, variable selection and non-parametric goodness-of-fit. Department of Statistics, Stanford University. July, 2002.
- 294. Varying-coefficient model with correlated error, Methodology Center, Pennsylvania State University, Feb., 2002.
- 295. Variable selection via nonconcave penalized likelihood and its oracle properties, Department of Statistics, UCLA, April, 2000.
- 296. Variable selection via nonconcave penalized likelihood and its oracle properties, Oncology Center, John Hopkins University, April, 2000.
- 297. Variable selection via nonconcave penalized likelihood, Department of Math., Bowling Green State Univ., Feb., 2000.
- Variable selection via nonconcave penalized likelihood, School of Industrial Engineering, Georgia Tech., Feb. 2000.
- 299. Variable selection via nonconcave penalized likelihood, Department of MSIS, The Penn State University at University Park. Feb. 2000.
- 300. Variable selection via nonconcave penalized likelihood, Department of Biostatistics, UCLA. Jan. 2000.
- 301. Variable selection via nonconcave penalized likelihood, Department of Biostat. and Epid., St. Jude Children Research Hospital, Jan. 2000.

D. Short Courses

- 302. Statistical Inference for High Dimensional Regression, 6 hour series talk. School of Statistics and Data Science, Nankai University, Tianjin, May 27 28, 2019.
- 303. Variable Selection in Generalized Linear Models, 12-hour lecture. School of Mathematics and Statistics, Xian Jiaotong University, Xian, May 23 25, 2019.
- 304. *High-Dimensional Data Modeling and its Applications*, 18-hour lecture. School of Mathematics and Statistics, Xian Jiaotong University, Xian, September 24 29, 2018.
- 305. High-Dimensional Data Modeling and its Applications, 16-hour lecture. Institute of Statistics, Nankai University, Tianjin, October 24 27, 2017.
- 306. High-Dimensional Data Modeling and its Applications, 18-hour lecture. School of Data Science, Fudan University, Shanghai, July 2 7, 2017.
- 307. Statistical Inference for High-dimensional Data. 4-hour lecture. Institute of Big Data, Renmin University of China, Beijing, June 26-27, 2017.
- 308. Feature Screening for Ultrahigh Dimensional Data. Six-hour lecture, Institute of Applied Mathematics, Chinese Academy of Sciences, May July, 2016.
- 309. Feature Screening for Ultrahigh Dimensional Data. Four-hour lecture, Zhejian University, China, June, 2016.
- 310. Feature Screening for Ultrahigh Dimensional Data. Six-hour lecture, Nankai University, China, May, 2016.
- 311. Feature Screening for Ultrahigh Dimensional Data. Three-hour lecture, Xiamen University, China, July, 2015.
- 312. Feature Screening for Ultrahigh Dimensional Data. Six-hour lecture, Nankai University, China, May, 2015.
- 313. Model-Free Feature Screening for Ultrahigh Dimensional Data. Three-hour lecture, Peking University, China, December, 2014.
- 314. An Introduction to Penalized Methods. Ten-hour lecture, Fudan University, China. July 2012.
- 315. Variable Selection in Linear Models via Regularization: Methods, Algorithms and Recent Developments. Six-hour lecture, Xiamen University, China, July 2012.
- 316. High and Ultrahigh Dimensional Data Analysis. 8-hour lecture. Institute of Applied Mathematics, Chinese Academy of Sciences jointly with Capital Normal University and Beijing Normal University, October, 2011.
- 317. Variable selection and regularization method. 10-hour lecture. Capital Normal University jointly with by Beijing Normal University and Institute of Applied Mathematics, Chinese Academy of Sciences, October, 2011
- 318. Recent Development on Variable Selection. 10-hour lecture. Department of Statistics, Fudan University. June 2008.

Organizer for Professional Conferences

- 1. Scientific Program Committee of the Inaugural China Joint Statistical and Data Science Meetings (CJSM) July 10-13, 2023, Beijing, P.R. China.
- 2. Chair of Scientific Program Committee of International Conference on Big Data and Statistical Interdisciplinary Sciences, July 4 6, 2023, East China Normal University, Shanghai, P.R. China.
- 3. Chair of Scientific Program Committee of Statistical Foundations of Data Science and Their Application. May 8 10, 2023, Princeton University, USA.
- 4. Vice Scientific Program Chair for the 10th World Congress in Probability and Statistics, Seoul, South Korea, August 17 21 2020.
- 5. Scientific program committee member for the 2019 International Conference on Data Science, December 13 15, 2019, Fudan University, Shanghai, P. R. China.
- 6. Scientific program committee member for the 2018 International Chinese Statistical Association (ICSA-China) conference, July 2 5, 2018, Qingdao, P. R. China
- Committee Chair for Pennsylvania State Statistics 50 Year Anniversary Conference, University Park, PA, May 8 10, 2018.
- 8. Scientific program committee for International Workshop on Data Science and Big Data Research, Renmin University of China, Beijing, P.R. China, December, 2015.
- 9. Co-organized with Peter Hall an invited talk session on "Annals of Statistics Special Invited Session: Recent Advances on Estimation of High Dimensional Matrix" for JSM 2015, August 2015, Seattle, WA.
- 10. Scientific program committee member for the Nankai Statistics Forum, Nankai University, July 6-8, 2015. Tianjin, P. R. China.
- 11. Scientific program committee member for the 10th International Conference on Frontiers of Statistics. June 24-27, 2015, Beijing, P. R. China.
- 12. Scientific Program committee member for The First International Conference on Big Data & Applied Statistics, November 28-30, 2014, Beijing, P.R. China.
- 13. Chair for scientific program and local organizer committee for the 2013 Rao Prize Conference. October 2013, The Pennsylvania State University.
- Chair of Scientific Program Committee for the Institute of Mathematical Statistics (IMS)-China International Conference on Statistics and Probability 2013, July 2013, Chengdu, China.
- 15. Scientific Program committee member for The Second Taihu Lake International Statistical Forum, July 2013, Suzhou, P. R. China.

- 16. Organize an invited talk session on *Nonparametric and semiparametric statistical inference* for high-dimensional data. Intentional Chinese Statistical Association (ICSA) International Conference, December 2013, Hong Kong.
- 17. Organize an invited talk session on *Recent advance of statistical inference tools for mixture models*. Intentional Chinese Statistical Association (ICSA) International Conference, December 2013, Hong Kong.
- 18. Organize an invited talk session on *New statistical procedures for analyzing Big data*. The Spring Research Conference, June 2013 University of California at Los Angeles.
- 19. Organize an invited talk session on Recent advances on variable selection and regularization methods. The First Conference of the International Society for Nonparametric Statistics, June, 2012, Chalkidiki, Greece.
- 20. Co-chair of scientific program committee for the second IMS Asia Pacific Rim meeting in 2012, Tokyo, Japan.
- 21. Co-chair of scientific program committee for the first IMS Asia Pacific Rim meeting in 2009, Seoul, Korea.
- 22. Organize an invited talk session on Recent Advances on Feature Selection and Its Application for ENAR09, San Antonio, TX.
- 23. Organize an invited talk session on Semiparametric Regression Methods for Longitudinal Data Analysis for ENAR07, Atlanta, GA.
- 24. ASA Biometrics Section program chair for JSM 2007, August 2007, Salt Lake City, Utah.
- 25. Organize a topic contributed talk session on *Recent advances on functional data analysis* for International Biometrics Society (IBS) 2006, July 2006, Montreal, Canada.
- 26. Organize an invited talk session on Semiparametric Modeling in Longitudinal Data Analysis for JSM 2005, August 2005, Minneapolis, MN.
- 27. Organize an invited talk session on Analysis of Intensively Collected Data. JSM 2004, August 2004, Toronto, Canada.
- 28. Organize an invited talk session on *Model Selection and Testing for Semiparametric and Nonparametric Models with Applications to Longitudinal Data*. International Conference on Statistics in Health Sciences. Nantes, France, June 23-25, 2004.
- 29. Organize an invited talk session on Analysis of Intensively Collected Data. ENAR 2004, March 2004, Pittsburgh, PA.
- 30. Organize an invited talk session on Assessment of Measurement Agreement. International Chinese Statistical Association, 2004 Applied Statistics Symposium, San Diego, June, 2004.
- 31. Organize an invited talk session on *High-dimensional hypothesis testing and model selection* for functional data analysis. ENAR 2003, April 2003, Tampa, FL.

- 32. Organize a topic contributed talks on *Model Selection: Regularization and Computation*. JSM 2002, August, 2002, New York.
- 33. Organize an invited talk session on *Recent Advances on Local Modeling*. International Conference on Current Advances and Trends in Nonparametric Statistics July 15-19, 2002, Crete, Greece.

Professional Service

Being a reviewer or panelist of grant proposals for the following grant agents:

Panelist for National Institute of Health (USA)

Panelist and reviewer for National Science Foundation (USA)

Reviewer for National Security Agent (USA)

Reviewer for National Science and Engineering Research Council of Canada

Reviewer for Engineering and Physical Sciences Research Council (UK)

Reviewer for Hong Kong Research Council

Reviewer for Singapore Ministry of Education

Reviewer for National Taiwan University (Internal Grant proposals)

Reviewer for National University of Singapore (Internal Grant Proposals)

Reviewer for Hong Kong Baptist University (Internal Grant Proposals)

Reviewer for King Abdullah University of Science and Technology (KAUST)

Competitive Research Grants (CRG) program

Being a referee for the following more than 40 journals:

Annals of Statistics, Biometrika, Journal of the American Statistical Association, Journal of Royal Statistical Society, Series B, Proceeding of National Academy of Sciences, Biometrics, Technometrics, Bernoulli, Statistics Sinica, Science in China, Series A, Canadian Journal of Statistics, Journal of Computational and Graphical Statistics, Journal of Multivariate Analysis, Journal of Statistical Planning and Inference, Acta Mathematicae Applicatae Sinica, American Statistician, Australian and New Zealand Journal of Statistics, Annals of Institute Statistical Mathematics, Journal of Nonparametric Statistics, Chinese Journal of Applied Probability and Statistics, Communications in Statistics, Series A and Series B, Sankhya, Computational Statistics and Data Analysis, Statistics, Statistics and Computing, Statistics & Probability Letters, Institute of Industrial Engineering Transaction, American Statistician, Statistics in Medicine, Metrika, Journal of Econometrics, Econometric Journal, Econometric Theory, The Review of Economics and Statistics, Journal of Complexity, International Journal of Materials and Product Technology, AIAA Journal, Quantitative Finance, Nicotine & Tobacco Research, British Journal of Mathematical and Statistical Psychology, Journal of Machine Learning and Research.

Professional Societies

Member of American Statistical Association (Fellow elected in 2011)

Life-time Member of Institute of Mathematical Statistics (Fellow elected in 2009)

Member of The American Association for the Advancement of Science (Fellow elected in 2017). Member of Bernoulli Society Member of the Eastern North American Region of the International Biometrics Society Permanent Member of International Chinese Statistical Association

Long-term visitor, Post-docs, Ph.D. and Master Students

Host long-term visiting faculty with full finance support for

- 1. Shurong Zheng, Northwestern Normal University, Changchun, China, July 10, 2015 July 9, 2016.
- 2. Yeqing Zhou, Tongji University, Shanghai, China, December 1, 2024 June 30, 2025

Host long-term visiting faculty with partial finance support for

- 1. Guangren Yang, Jinan University, Guangzhou, China, February 15, 2016 February 14, 2018.
- 2. Xia Cui, Guangzhou University, Guangzhou, China, July 15, 2016 July 14, 2017.
- 3. Yanbo Pei, Capital University of Economics and Business, Beijing, China, July 15, 2016 July 14, 2017.
- 4. Changliang Zou, Nankai University, Tianjin, China, September 29, 2017 to March 9, 2018.
- Yifan Xia, Southwestern University of Finance and Economics, Chengdu, China, January 1, 2018 - December 31, 2018.
- 6. Changliang Zou, Nankai University, Tianjin, China, March 15, 2019 to September 10, 2019.

Host long-term visiting faculty without finance support for

- 1. Baihua He, University of Science and Technology of China, October 15, 2024 March 14, 2025.
- 2. Xiao Guo, University of Science and Technology of China, December 15, 2024 December 14, 2025.

Post-docs supervised for

- 1. John Dziak, 2006 2008 (Current position: University of Illinois at Chicago)
- 2. Xianming Tan, 2008 2011 (Current position: University of North Carolina at Chapel Hill)
- 3. Mariya Shiyko, 2009 2011 (Current position: Northeastern University)
- 4. Liping Zhu, 2009 2011 (Current position: Remin University of China)
- 5. Jingyun Yang, 2011 2013 (Current position: Rush University)
- 6. Chen Xu, 2013 2015 (Current position: University of Ottawa)

- 7. Lucy Lu, 2015 2016 (Current position: Data scientist at Google Inc.)
- 8. Zhao Chen, 2014 2018 (Current position: Fudan University as tenure-track assistant professor)
- 9. Xuening Zhu, 2017 2018 (Current position: Fudan University as tenure-track assistant professor)
- 10. Yuan Ke, 2017 2018 (Current position: University of Georgia as tenure-track assistant professor)
- 11. Zeng Li, 2017 2019 (Current position: China Southern Science and Technology University as tenure-track assistant professor)
- 12. Xu Guo, 2018 2020 (Current position: Beijing Normal University as associate professor)
- 13. Danning Li, 2018 2020 (Current position: Northeastern Normal University as associate professor)
- 14. Haojie Ren, 2019 2021 (Current position: Shanghai Jiaotong University as associate professor)
- 15. Changcheng Li, 2019 2021 (Current position: Dalian University of Technology as assistant professor)
- 16. Haotian Xu, 2022 2023.

Ph.D. dissertations or MS theses under my supervision

- 1. Yuxiao Li, Ph.D. candidate in Statistics (expected to graduate in August, 2029).
- 2. Jingyi Guo, Ph.D. candidate in Statistics (expected to graduate in August, 2029).
- 3. Jiayu Wu, Ph.D. candidate in Statistics (expected to graduate in August, 2029).
- 4. Xiaopu Wang, Ph.D. candidate in Statistics (expected to graduate in August, 2029).
- 5. Haoyue Li, Ph.D. candidate in Statistics (expected to graduate in August, 2028).
- 6. Shubo Li, Ph.D. candidate in Statistics (jointly with Lingzhou Xue, expected to graduate in August, 2028).
- 7. Zhewei Zhang, Ph.D. candidate in Statistics (jointly with Yanyuan Ma, expected to graduate in August, 2027).
- 8. Yizhe Ding, Ph.D. candidate in Statistics (jointly with Lingzhou Xue, expected to graduate in August, 2027).
- 9. Yuankai Ma, Ph.D. candidate in Statistics (jointly with Le Bao, expected to graduate in August, 2027).

- 10. Zelin He, Ph.D. candidate in Statistics (expected to graduate in August, 2027).
- 11. Wenlong Yang, Ph.D. candidate in Statistics (jointly with Le Bao, expected to graduate in August, 2026).
- 12. Zihao Zheng, Ph.D. candidate in Statistics (jointly with Maggie Niu, expected to graduate in August, 2026).
- 13. Ziqian Hong, Ph.D. candidate in Statistics (August, 2025).

Hong, Z. (2025). Transfer Learning for Precision Matrix Estimation and its Application. Ph.D. dissertation, Department of Statistics, The Pennsylvania State University at University Park.

- 14. Dian Zheng, Ph.D. candidate in Statistics (jointly with Lingzhou Xue, August, 2025).
 Zheng, D. (2025). Advancing High-Dimensional Statistical Inference via Online Learning and Data Integration. Ph.D. dissertation, Department of Statistics, The Pennsylvania State University at University Park.
- 15. Yifan Jiang, Ph.D. candidate in Statistics (jointly with Le Bao, August, 2025).
 Jiang, Y. (2025). Topics on Quantile Regression, Rank Regression and Causal Analysis to HIV Data. Ph.D. dissertation, Department of Statistics, The Pennsylvania State University at University Park.
- 16. Vivian Xinyi Cheng, Ph.D. candidate in Statistics (August, 2024).

Cheng, V. X. (2024). Distributed Inference for Nonparametric and Semiparametric Regression Models: Optimal Weighted Averaging and Bandwidth Selection. Ph.D. dissertation, Department of Statistics, The Pennsylvania State University at University Park.

First job position: Ernst & Young

17. Shou Shou Liu, Ph.D. in Statistics (August, 2023).

Liu, S.S. (2023). Statistical Learning on High-Dimensional Multi-Source Data. Ph.D. dissertation, Department of Statistics, The Pennsylvania State University at University Park.

First job position: Postdoc at Columbia University

18. Zhaoxue Tong, Ph.D. in Statistics (August, 2023).

Tong, Z. (2023). Robust Techniques for High-dimensional Data: Modern Approaches and Applications. Ph.D. dissertation, Department of Statistics, The Pennsylvania State University at University Park.

First job position: Tenure-track assistant professor at Department of Statistics, Florida State University.

19. Zhe Zhang, Ph.D. in Statistics (August, 2023).

Zhang, Z. (2023). Inference Methods for High-Dimensional Data: A Focus On Different Hypothesis Testing Problems. Ph.D. dissertation, Department of Statistics, The Pennsylvania State University at University Park.

First job position: Postdoc at University of North Carolina at Chapel Hill.

20. Shijie Cui, Ph.D. in Statistics (August, 2022).

Cui, S. (2022). Statistical Inference for High-dimensional Models Ph.D. dissertation, Department of Statistics, The Pennsylvania State University at University Park.

First job position: Data Scientist at Wells Fargo.

21. Yujie Liao, Ph.D. in Statistics (August, 2022).

Liao, Y. (2022). Varying Coefficient Mediation Models. Ph.D. dissertation, Department of Statistics, The Pennsylvania State University at University Park.

First job position: Data Scientist at Uber.

22. Alex Zhao, Ph.D. in Statistics (August, 2022).

Zhao, A. Y. (2022). Tests of Hypotheses on Regression Coefficients in High-dimensional Regression models. Ph.D. dissertation, Department of Statistics, The Pennsylvania State University at University Park.

First job position: Senior Data Scientist, Boston Consulting Group

23. Mudong Zeng, Ph.D. in Statistics (December, 2021).

Zeng, M. (2021). Statistical Inference for High-dimensional Mediation Model. Ph.D. dissertation, Department of Statistics, The Pennsylvania State University at University Park.

First job position: Quantiataive Analytic Specialist for Cross-functional Model Validation at Wells Fargo

Current position: Vice President for Applied AI Research at Golden Sachs

24. Zhanrui Cai, Ph.D. in Statistics (August, 2021).

Cai, Z. (2021). New Statistical Tools for Independence and Conditional Independence. Ph.D. dissertation, Department of Statistics, The Pennsylvania State University at University Park.

First job position: Post-doctoral Fellow at Carnegie Mellon University.

Current position: Tenure-track assistant professor at Iowa State University.

25. Jia Wang, Ph.D. in Statistics (August, 2021).

Wang, J. (2021). Topics in Variable Selection for High-Dimensional Data. Ph.D. dissertation, Department of Statistics, The Pennsylvania State University at University Park.

First job and current position: Data Scientist at Google.

26. Xiufan Yu, Ph.D. in Statistics (jointly with Lingzhou Xue, August, 2021).

Yu, X. (2019). Nonparametric estimation of sufficient forecasting with a diverging number of factors. Master Thesis in Statistics. Department of Statistics, The Pennsylvania State University at University Park.

Yu, X. (2021). Topics on Power Enhancement in High-Dimensional Hypothesis Tests. Ph.D. dissertation, Department of Statistics, The Pennsylvania State University at University Park.

First job and current position: Tenure-track assistant professor at Notre Dame University.

27. Jiawei Wen, Ph.D. in Statistics (jointly with Ethan Fang, December, 2020).

Wen, J. (2020). Distributed algorithms and efficient tuning for high dimensional regularization methods. Ph.D. dissertation, Department of Statistics, The Pennsylvania State University at University Park.

First job and current position: Data scientist at Facebook.

28. Mengyan Li, Ph.D. candidate in Statistics (jointly with Yanyuan Ma, August, 2020).

Li, M. (2020). Statistical Inference with Corrupted Data. Ph.D. dissertation, Department of Statistics, The Pennsylvania State University at University Park.

First job and current position: Tenure-track assistant professor at Bentley University

29. Wanjun Liu, Ph.D. in Statistics (August, 2019).

Liu, W. (2019). New Statistical Tools for High-dimensional Data Modelling. Ph.D. dissertation, Department of Statistics, The Pennsylvania State University at University Park.

First job and current position: Data scientist at LinkedIn

30. Ling Zhang, Ph.D. in Statistics (August, 2019)

Zhang, L. (2019). Procedures for feature screening and interaction detection in high dimensional data modelling. Ph.D. dissertation, Department of Statistics, The Pennsylvania State University at University Park.

First job and current position: Data scientist at Wells Fargo Bank

31. Changcheng Li, Ph.D. in Statistics (August, 2019)

Li, C. (2019). Topics in High-Dimensional Statistical Inference. Ph.D. dissertation, Department of Statistics, The Pennsylvania State University at University Park.

First job and current position: Postdoc fellow at Pennsylvania State University.

Current position: Full professor at Dalian University of Science and Technology.

32. Songshan Yang, Ph.D. in Statistics (August, 2018)

Yang, S. (2018). New Statistical Analytic Tools for High-dimensional Data. Ph.D. dissertation, Department of Statistics, The Pennsylvania State University at University Park.

First job and current position: Blueshift, ARC, LLC.

Current position: Tenure-track assistant professor at Institute of Big Data and Statistics, Renmin University of China.

33. Jingyi Ye, Ph.D. in Statistics (jointly with Le Bao, December 2017)

Ye, J. (2017). New Statistical Procedures for Analysis of HIV Data and High Dimensional Data. Ph.D. dissertation, Department of Statistics, The Pennsylvania State University at University Park.

First job and current position: Bunker Hill Insurance, Statistician.

34. Wanghuan Chu, MS in statistics (December 2014), Ph.D. in Statistics (jointly with Matthew Reimherr, August, 2016)

Chu, W. (2014). New Screening Procedure for Ultrahigh Dimensional Varying Coefficient Models in Longitudinal Data Analysis. Master Thesis in Statistics. Department of Statistics, The Pennsylvania State University at University Park.

Chu W. (2016). Feature selection for ultra-high dimensional longitudinal data. Ph.D. dissertation, Department of Statistics, The Pennsylvania State University at University Park.

First job and current position: Google Inc.

35. Han Hao, Ph.D. in Statistics (jointly with Rongling Wu, August, 2016)

Hao, H. (2016). Modeling the Genetic Architecture of Complex Traits. Ph.D. dissertation, Department of Statistics, The Pennsylvania State University at University Park.

First job and current position: Tenure-Track assistant professor at University of North Texas.

36. Ye Yu, MS in Statistics (December, 2014), Ph.D. in Statistics (December, 2015)

Yu, Y. (2014). A New Variable Screening Procedure for Cox's Model. Master Thesis, Department of Statistics, The Pennsylvania State University at University Park.

Yu, Y. (2015). New Procedures for Cox's Survival Models. Ph.D. dissertation, Department of Statistics, The Pennsylvania State University at University Park.

First job and current position: Quantitative Analytic at Wells Fargo

37. Yuan Huang, Ph.D. in Statistics (August, 2015).

Huang, Y. (2015). Projection Test for High-Dimensional Mean Vectors with Optimal Direction. Department of Statistics, The Pennsylvania State University at University Park.

First job: Postdoc at Yale University.

Current position: Assistant professor at Yale University.

38. Yaqun Wang, Ph.D. in Statistics (jointly with Rongling Wu, August, 2015)

Wang, Y. (2015). Inference of Gene Regulatory Network Based on Gene Expression Dynamics in Response to Environmental Signals. Department of Statistics, The Pennsylvania State University at University Park.

First job and current position: Tenure-track assistant professor, Department of Biostatistics, Rutgers University.

39. Ningtao Wang, Ph.D. in Statistics (jointly with Rongling Wu, August, 2015)

Wang, N. (2015). A Block Mixture Model to Map eQTLs for Gene Clustering. Department of Statistics, The Pennsylvania State University at University Park.

First job and current position: Tenure-track assistant professor, School of Public Health, University of Texas.

Current position: Data scientist at Alibaba, Hangzhou, P.R. China

40. Jessica Trail, Ph.D. in Statistics (jointly with Linda M. Collins, May, 2015)

Trail, J. (2015). Dynamic Models for Intensive Longitudinal Data: New Models, Statistical Procedures, and Applications. Department of Statistics, The Pennsylvania State University at University Park.

First job and current position: Argonne National Labs.

41. Wei Sun, Ph.D. in Statistics (May, 2015)

Sun, W. (2015). Feature Screening in Ultra-high Dimensional Survival Data Analysis. Ph.D. dissertation, Department of Statistics, The Pennsylvania State University at University Park. First job and current position: JP Morgan.

42. Hanyu Yang, Ph.D. candidate in Statistics (December, 2014)

Yang, H. (2014). Statistical Models for Scalar Response with Longitudinal Covariates. Department of Statistics, The Pennsylvania State University at University Park.

First job and current position: Quantitative Analytic Consultant at Wells Fargo

43. Xiaoyu Liu, Ph.D. in Statistics (December, 2014)

Liu, X. (2014). Joint Modeling Longitudinal and Survival Data: New models, Computing Techniques and Applications. Department of Statistics, The Pennsylvania State University at University Park.

First job and current position: Capital One Bank & Data Scientist at Apple.

44. Xizhen Cai, Ph.D. in Statistics (jointly with David Hunter, August, 2014)

Cai, X. (2014). Model Selection and Survival Analysis with Application to Large Time-Varying Networks. Ph.D. dissertation, Department of Statistics, The Pennsylvania State University at University Park.

First job: Visiting assistant professor at Carnegie Mellon University.

Current position: Tenure-track assistant professor at Williams College.

45. Lejia Lou, Ph.D. in Statistics (December 2013).

Lou, L. (2013). Thresholded Partial Correlation Approach in High-Dimensional Linear Models and Partial Linear Models. Ph.D. dissertation, Department of Statistics, The Pennsylvania State University at University Park.

First job and current position: Bank of America, Charlotte, NC.

Current Job: Ernst & Young

46. Ying Zhang, Ph.D. in Statistics (August, 2013)

Zhang, Y. (2013). New Models for Conditional Covariance Matrix. Ph.D. dissertation, Department of Statistics, The Pennsylvania State University at University Park.

First job and current position: Study Statistician at Sanofi, New Jersey. Current Job: AbbVie Inc.

47. Jingyuan Liu, Ph.D. in Statistics (jointly with Rongling Wu, May, 2013)

Liu, J. (2013). Statistical Procedures for Ultrahigh Dimensional Varying Coefficient Models, Their Extension to Longitudinal Structure and Partially Linear Models. Ph.D. dissertation, Department of Statistics, The Pennsylvania State University at University Park.

First job position: Assistant professor, Xiamen University, China.

Current position: Full professor, Xiamen University, China.

48. Esra Kurum, Ph.D. in Statistics (August, 2012)

Kurum, E. (2012). Joint Modeling of Longitudinal Binary and Continuous Responses: New Models, Statistical Procedures and Applications. Ph.D. dissertation, Department of Statistics, The Pennsylvania State University at University Park.

First job position: Tenure-track assistant professor at Istanbul Medeniyet University.

Current position: Tenured associate professor at University of California at Riverside.

- 49. Zhao Chen, Ph.D. in Statistics, University of Science and Technology of China (visiting Penn State from September 2010 to August, 2012; jointly with Yaohua Wu at USTC, July 2012) Chen, Z. (2012). New Statistical Procedures for Time Series Data and Robust Modeling. Ph.D. dissertation, Department of Statistics, University of Science and Technology of China. First job and current position: Post-doc at Princeton University & Professor of Data Science, Fudan University
- 50. Guifang Fu, Ph.D. in Statistics (jointly with Rongling Wu, expected to graduate in August, 2012)

Fu, G. (2012). Modeling Framework of Biological Shape Gene Identification. Ph.D. dissertation, Department of Statistics, The Pennsylvania State University at University Park.

First job position: Tenure-track assistant professor.

Current position: Tenured associate professor at Binghamton University, State University of University.

51. Wei Zhong, Ph.D. in Statistics (August, 2012)

Zhong, W. (2012). Feature Screening and Variable Selection for Ultrahigh Dimensional Data Analysis. Ph.D. dissertation, Department of Statistics, The Pennsylvania State University at University Park.

First job: Tenure-track assistant professor, WISE, Xiamen University.

Current position: Full professor, WISE, Xiamen University.

52. Junyi Lin, MS in Statistics (August, 2011); Ph.D. in Statistics (December, 2011)

Lin, J. (2011). Variance-bias Trade-off in Generalized Linear Regression Models. Master Thesis, Department of Statistics, The Pennsylvania State University at University Park.

Lin, J. (2011). Model Misspecification and Feature Screening for Ultrahigh Dimensional Data. Ph.D. dissertation, Department of Statistics, The Pennsylvania State University at University Park.

First job and current position: Statistician, Fifth Third bank.

53. Mina Yoo, Ph.D. in Statistics (jointly with Mosuk Chow, August, 2011)

Yoo, M. (2011). Measures of agreement in method comparison studies for intensive longitudinal data. Ph.D. dissertation, Department of Statistics, The Pennsylvania State University at University Park.

First job: Postdoc, Penn State University.

54. Jiahan Li, Ph.D. in Statistics (jointly with Rongling Wu, August 2011)

Li, J. (2011). The Bayesian LASSO, Bayesian SCAD and Bayesian Group LASSO with Applications to Genome-wide Association Studies. Ph.D. dissertation, Department of Statistics, The Pennsylvania State University at University Park.

First job: Tenure-track assistant professor, Notre Dame University. Current Job: Grantham, Mayo, Van Otterloo & Co. LLC (GMO)

55. Kiranmoy Das, Ph.D. in Statistics (jointly with Rongling Wu, August 2011)

Das, K. (2011). Semiparametric Bayesian Function Mapping with Irregular Sparse Longitudinal Data. Ph.D. dissertation, Department of Statistics, The Pennsylvania State University at University Park.

First job: Tenure-track assistant professor, Temple University. Current Job: Indian Statistical Institute, Kolkata

56. Yijia Feng, MS in Statistics (August, 2008); Ph.D. in Statistics (jointly with Zhibiao Zhao, May 2011)

Feng, Y. (2008). Conditional Quantile Estimation with Neural Network Structure. Master Thesis, Department of Statistics, The Pennsylvania State University at University Park.

Feng, Y. (2011). Robust Nonparametric Function Estimation with Serially Correlated Data. Ph.D. dissertation, Department of Statistics, The Pennsylvania State University at University Park.

First job and current position: Statistician, Google Inc.

57. Kion Kim, Ph.D. in Statistics (jointly with Damla Sentürk, December, 2010)

Kim, K. (2010). The Recent History Functional Linear Model and its Extension to Sparse Longitudinal Data. Ph.D. dissertation, Department of Statistics, The Pennsylvania State University at University Park.

First job and current position: Statistician in Samsung Fire and Marine insurance

58. Yuejiao Jiang, Ph.D. in Statistics (August, 2009)

Jiang, Y. (2009). Estimation and forecasting methodologies for nonparametric regression models via dynamic linear models. Ph.D. dissertation, Department of Statistics, The Pennsylvania State University at University Park.

First job: Statistician, Hartford Insurance Group

Current position: Statistician, Bank of America

59. Bo Kai, MS in Statistics (August, 2008); Ph.D. in Statistics (jointly with David Hunter, August, 2009)

Kai, B. (2008). Variable Selection in Robust Linear Models. Master Thesis, Department of Statistics, The Pennsylvania State University at University Park.

Kai, B. (2009). Robust nonparametric and semiparametric modeling. Ph.D. dissertation, Department of Statistics, The Pennsylvania State University at University Park.

First job: Tenure-track assistant professor, College of Charleston.

Current position: Tenured associate professor, College of Charleston.

60. Mian Huang, Ph.D. in Statistics (August, 2009)

Huang, M. (2009). Nonparametric techniques in finite mixture of regression models. Ph.D. dissertation, Department of Statistics, The Pennsylvania State University at University Park.

First job: Tenure-track assistant professor at Shanghai University of Finance and Economics.

Current position: Tenured associate professor at Shanghai University of Finance and Economics.

61. Yiyun Zhang, MS in Statistics (August, 2006); Ph.D. in Statistics (May, 2009)

Zhang, Y. (2006). Variable selection via penalized likelihood and iterative conditional minimization algorithm. Master Thesis, Department of Statistics, The Pennsylvania State University at University Park.

Zhang, Y. (2009). Regularization parameter selection for variable selection in high-dimensional modelling. Ph.D. dissertation, Department of Statistics, The Pennsylvania State University at University Park.

First job: Biostatistician, Novartis Oncology.

Current position: Associate Director Biostatistics, Novartis Oncology.

62. Yan Li, Ph.D. in Statistics (May, 2008)

Li, Y. (2008). Some contributions to nonparametric modeling with correlated data. Ph.D. dissertation, Department of Statistics, The Pennsylvania State University at University Park.

First job: Statistician, Capital One.

Current position: Ebay Inc. Shanghai, P.R. China

63. Jingyun Yang, Ph.D. in Statistics (jointly with Vern Chinchilli, August, 2007)

Yang, J. (2007). Measurement of Agreement for Categorical Data. Ph.D. dissertation, Department of Statistics, The Pennsylvania State University at University Park.

First job: Postdoc, Massachusetts General Hospital

Current position: Tenured-Track Assistant Professor, Rush University.

64. Weixin Yao, Ph.D. in Statistics (jointly with Bruce Lindsay, August, 2007)

Yao, W. (2007). On Using Mixtures and Modes of Mixtures in Data Analysis. Ph.D. dissertation, Department of Statistics, The Pennsylvania State University at University Park.

First job: Tenure-track Assistant Professor, Department of Statistics, Kansas State University.

Current position: Full Professor, Department of Statistics, University of California at Riverside.

65. Zhe Zhang, MS in Statistics (May, 2005); Ph.D. in Statistics (May, 2007)

Zhang, Z. (2005). Modeling computer experiments with functional response using nonparametric and semi-parametric models. Master Thesis, Department of Statistics, The Pennsylvania State University at University Park.

Zhang, Z. (2007). New Modeling Procedures for Functional Data in Computer Experiments. Ph.D. dissertation, Department of Statistics, The Pennsylvania State University at University Park.

First job and current position: Statistician, Bank of America

66. Yang Wang, Ph.D. in Statistics (May, 2007).

Wang, Y. (2007). Varying-Coefficient Models: New Models, Inference Procedures and Applications. Ph.D. dissertation, Department of Statistics, The Pennsylvania State University at University Park.

First job: Statistician, Citi Bank.

Current Position: Vanke Group, Shenzhen, P.R. China.

67. John Dziak, MS in Statistics (December, 2004); Ph.D. in Statistics (August, 2006).

Dziak, J. (2004). Penalized likelihood and quasi-likelihood for variable selection in linear models. Master Thesis, Department of Statistics, The Pennsylvania State University at University Park.

Dziak, J. (2006). Penalized quadratic inference functions for variable selection in longitudinal research. Ph.D. dissertation, Department of Statistics, The Pennsylvania State University at University Park.

First job: Postdoc, The Methodology Center, Penn State University

Current position: Research associate, The Methodology Center, Penn State University

68. Wei Wang, MS in Statistics (August, 2003).

Wang, W. (2003). Analysis of inhaled beta-agonists data using functional linear models and mixed effects models. Master Thesis, Department of Statistics, The Pennsylvania State University at University Park.

First job and current position: Biostatistician, Amgen Inc.

69. Caroline E. Geier, MS in Statistics (August, 2003).

Geier, C. E. (2003). Analysis of ecological momentary assessment data using varying coefficient models. Master Thesis, Department of Statistics, The Pennsylvania State University at University Park.

First job: Research assistant at the Consulting Center, Penn State University

Current position: Statistician in Kimberly-Clark Inc

Served as dissertation committee members for the following Ph.D. students:

- 1. Jerry J. Maples (Ph.D. in Statistics, 2001)
- 2. Wei Zhang (MS with minor Statistics, 2001)
- 3. Laura J. Simon (Ph.D. in Statistics, 2002)
- 4. Jiawei Liu (Ph.D. in Statistics, 2003)
- 5. Efi Antoniou (Ph.D. in Statistics, 2004)
- 6. Rui Ding (Ph.D. in Statistics, 2004)
- 7. Ke Yang (Ph.D. in Statistics, 2004)
- 8. Jay D. Martin (Ph.D. in Mechanical Engineering, 2005)
- 9. Shuohui Chen (Ph.D. in Industry Engineering, 2006)
- 10. Zhiqun Tang (Ph.D. in Human Development and Family Studies, 2006)
- 11. Guiling Wang (Ph.D. in Computer Sciences and Engineering, 2006)
- 12. Tammy Root (Ph.D. in Human Development and Family Studies, 2007)
- 13. Hosin Song (Ph.D. in Econometrics, 2007)
- 14. Hong Xu (Ph.D. in Statistics, 2007)
- 15. Xiaopan Yao (Ph.D. in Genetics, 2007)
- 16. Guodong Hui (Ph.D. in Statistics, 2007)
- 17. Yuexiao Dong (Ph.D. in Statistics, 2008)
- 18. M. Florencia Gabrielli (Ph.D. in Economics, 2008)
- 19. Zhijian Huang (Ph.D. in Finance, 2008)
- 20. Sun Yang (Ph.D. in IST, 2008)
- 21. Tianjing Li (Ph.D. in Math, 2008)
- 22. Min Hee Kim (Ph.D. in Statistics, 2009)
- 23. Min Hyung Kim (Ph.D. in Statistics, 2009)
- 24. Changlei Liu (Ph.D. in Computer Science and Engineering, 2009)
- 25. Lu Zhang, (Ph.D. in Statistics, 2010)
- 26. Rong Liu, (Ph.D. in Statistics, 2010)
- 27. Andreas Artemiou, (Ph.D. in Statistics, 2010)

- 28. Minwoo Park, (Ph.D. in Computer Science and Engineering, 2010)
- 29. Yi Yang, (Ph.D. in Computer Science and Engineering, 2010)
- 30. Haiqing Xu, (Ph.D. in Economics, 2011)
- 31. Yuanyuan Wan, (Ph.D. in Economics, 2011)
- 32. Po-Chun Chen, (Ph.D. in IST, 2011)
- 33. Adriano Zamborn, (Ph.D. in statistics, 2012)
- 34. Siwei Liu, (Ph.D. in HDFS, 2012)
- 35. Kung-Yao Lee, (Ph.D. in Statistics, 2012)
- 36. Seonjin Kim, (Ph.D. in statistics, 2013)
- 37. Yeying Zhu, (Ph.D. in statistics, 2013)
- 38. Nianqing Liu, (Ph.D. in Econometrics, 2013)
- 39. Xiaoye Li, (Ph.D. in Statistics, 2013)
- 40. Guo Yu, (Ph.D. in Meteorology, 2013)
- 41. Zhan Si (Ph.D. in Finance, 2014)
- 42. Wei Luo, (Ph.D. in Statistics, 2014)
- 43. Jonathan Poterjoy, (Ph.D. in Meteorology, 2014)
- 44. Xiaotian Zhu, (Ph.D. in Statistics, 2014)
- 45. Hongcheng Liu, (Ph.D. in Industrial Engineering, 2015)
- 46. Tsung-Yu Hsieh, (Ph.D. in Kinesiology, 2015)
- 47. Youngjoo Chu, (Ph.D. in Statistics, 2015)
- 48. Yang Liu, (Ph.D.in Statistics, 2015)
- 49. Zhuying Xu, (Ph.D. in Statistics, 2016)
- 50. Won Chul Song, (Ph.D. in Statistics, 2016)
- 51. Huihui Li, (Ph.D. in Economics, 2016)
- 52. Bhaeddine Taoufik, (Ph.D. in Statistics, 2016).
- 53. Dong Chen, (Ph.D. in Mathematics, 2017)
- 54. Jun Song, (Ph.D. in Statistics, 2017)
- 55. Kevin Lee, (Ph.D. in Statistics, 2017)

- 56. Zhanxiong Xu, (Ph.D. in Statistics, 2017)
- 57. Chuan-Sheng Wang, (Ph.D. in Statistics, 2018)
- 58. Jun Ni, (Ph.D. in Mathematics, 2018)
- 59. Hyun Bin Kang, (Ph.D. in Statistics, 2018)
- 60. Ardalan Mirshani, (Ph.D. in Statistics, 2019)
- 61. Debmalya Nandy, (Ph.D. in Statistics, 2019)
- 62. Zheye Yuan, (Ph.D. in Statistics, 2019)
- 63. Yue Xie, (Ph.D. in Industrial Engineering, 2019)
- 64. Xue Wang, (Ph.D. in Industrial Engineering, 2019)
- 65. Hang Li, (Ph.D. in Industrial Engineering, 20202)
- 66. Qiyuan Li, (Ph.D. in Education, 2019)
- 67. Anita Subramanian, (Ph.D. in Nutritional Sciences, 2019)
- 68. Zheng Li, (Ph.D. in Public Health Sciences, 2019)
- 69. Chixiang Chen, (Ph.D. in Public Health Sciences, 2020)
- 70. Wenjing Song, (Ph.D. in Industrial Engineering, 2020)
- 71. Min Chun Wu, (Ph.D. in Mathematics, 2021)
- 72. Ben Sheng, (Ph.D. in Statistics, 2021)
- 73. Bingyuan Liu, (Ph.D. in Statistics, 2021)
- 74. Ilias Moysidis, (Ph.D. in Statistics, 2021)
- 75. Rui Wang, (Ph.D. in Economics, 2022)
- 76. Nan Dou, (Ph.D. in Nutritional Sciences, 2022)
- 77. Arun Srinivasan, (Ph.D. in Statistics, 2022)
- 78. Jun Tao, (Ph.D. in Statistics, 2022)
- 79. Xinru Li, (Ph.D. in Industrial Engineering, 2023)
- 80. Caner Simsek, (Ph.D. in Political Science, 2023)
- 81. Qi Zhang, (Ph.D. in Statistics, 2023)
- 82. Sanam Sanei, (Ph.D. in Statistics, 2024)
- 83. Manuel Dario Hernandez-Bejarano, (Ph.D. in Statistics, 2024)

- 84. Zhong Zheng, (Ph.D. in Statistics, 2025)
- 85. Yin Tang, (Ph.D. in Statistics, 2025)
- 86. Siyuan Chen, (Ph.D. in Biostatistics, 2025)
- 87. Mushan Li, Ph.D. candidate in Statistics
- 88. Xihui Xu, Ph.D. candidate in Statistics
- 89. Kevin Mekuli, Ph.D. candidate in Industrial Engineering

Service to the University

- University Level:
 - 1. Member of the Physical Sciences Selection Panel for the Faculty Scholar Medal Program, Penn State University, 2024-2025.
 - 2. Member of the Social and Behavioral Sciences Selection Panel for the Faculty Scholar Medal Program, Penn State University, 2018-2021.
- College Level:
 - 1. Representative of Eberly Research Fellow committee, 2017-2018
 - 2. Member of distinguished professor review and selection committee, Eberly College of Sciences, 2017
 - 3. Member of Interdisciplinary Science BS Advisory Group, 2013
 - 4. Member of P & T Committee, Eberly College of Sciences, September 2009 August 2011
 - 5. Member of International program committee, Eberly College of Sciences, 2007
- Departmental Level:
 - 1. Associate Head, July 2018 -
 - 2. Chair of Committee for Departmental 50th Anniversary conference, 2017-2018
 - 3. Co-Chair for graduate study committee, July 2016 June 2017
 - 4. Chair of Committee for P.R. Krishnaiah Lecture and C.G. Khatri Lecture, July 2012 June 2015
 - 5. Member of graduate student admission committee, July 2002 present
 - 6. Member of graduate study committee, July 2012 present
 - 7. Chair of Committee for Cliff Clogg Lecture, 2016
 - 8. Chair of Committee for Marker Lecture of Statistical Sciences, 2016

- 9. Chair of 2013 Rao prize conference
- 10. Member of Faculty search committee, 2012 2013.
- 11. Committee Chair for graduate study committee, July 2007 June 2012
- 12. Member of computer committee, July 2005 June 2012.
- 13. Faculty advisor for Student Activity Committee, July 2010 June 2012
- 14. Member of department head search committee. 2012.
- 15. Committee Chair for the award committee, July 2005 June 2010
- 16. Member of Eberly Chair Professor search committee, July 2007 June 2008
- 17. Assistant committee chair for graduate study committee, July 2006 June 2007
- 18. Member of faculty recruiting committee, July 2006 June 2007
- 19. Member of Alumni workshop, July 2003 June 2006.
- 20. Chair of colloquium committee, July 2002 December 2004.
- 21. Chair of library committee in Department of Statistics, August 2001 June 2004.
- 22. Member of Master qualifier exam committee, 2003 2004.
- 23. Member of Ph.D. qualifier exam committee, 2001 2002 & 2005-2006.
- 24. Member of undergraduate study committee in Department of Statistics, August 2000 June 2002.
- 25. Member of library committee in Department of Statistics, August 2000 July 2001.

Teaching

Summary of Teaching Effectiveness Courses taught:

- Stat 240: Introduction to Biometrics (Undergraduate, Penn State)
- Stat 414: Introduction to Probability Theory (Undergraduate, Penn State)
- Stat 415: Introduction to Mathematical Statistics (Undergraduate, Penn State)
- Stat 517: Probability Theory (Advanced Graduate, Penn State)
- Stat 553: Asymptotic Tools (Advanced Graduate, Penn State)
- Stat 565: Multivariate Analysis (Advanced Graduate, Penn State)

Shown in next Table are scores from the Penn State Student Rating of Teaching effectiveness (SRTE) survey in two categories: overall quality of course (**Course**) and overall quality of instructor (**Instructor**). The scale of SRTE ranges from 1 (poor, lowest rating) to 7 (excellent, highest rating). Means (averages) were reported in SRTE before Summer 2020, while Medians were reported in SRTE after summer 2020. Starting from Fall 2023, Medians of SEEQ are reported. The scale of SEEQ ranges from 1 (poor, lowest rating) to 5 (excellent, highest rating).

		Course	Instructor
Means of SRTEs are reported and 7 is the best			
Spring 2001	Stat 415	6.18	6.51
Fall 2001	Stat 240	5.14	5.45
Fall 2001	Stat 414	6.04	6.35
Spring 2002	Stat 415	6.04	6.52
Fall 2002	Stat 414	5.77	5.90
Spring 2003	Stat 415	5.95	6.53
Fall 2003	Stat 415	5.95	6.53
Fall 2003	Stat 517	6.58	6.67
Fall 2004	Stat 517	6.11	5.94
Fall 2004	Stat 597(I)	6.54	6.69
Fall 2005	Stat 597(II)	6.58	6.67
Spring 2006	Stat 517	6.43	6.62
Fall 2007	Stat 553	6.33	6.67
Fall 2008	Stat 597(II)	6.78	6.89
Spring 2010	Stat 597(I)	6.52	6.62
Spring 2011	Stat 597(III)	6.93	6.93
Spring 2012	Stat 565	6.31	6.23
Spring 2013	Stat 597(I)	6.81	6.81
Spring 2014	Stat 565	6.25	6.25
Spring 2016	Stat 565	6.08	6.42
Spring 2017	Stat 597(III)	6.63	6.63
Fall 2017	PHS 565	5.00	5.50
Spring 2018	Stat 552	6.67	6.83
Spring 2018	Stat 590	6.00	6.33
Spring 2019	Stat 597(IV)	7.00	7.00
Spring 2019	Stat 590	5.75	6.50
Spring 2020	Stat 565	6.50	6.25
Medians of SRTEs are reported and 7 is the best			
Fall 2020	Stat 525	7.0	7.0
Fall 2021	Stat 597(IV)	7.0	7.0
Fall 2022	Stat 525	7.0	7.0
Medians of SEEQs are reported and 5 is the best			
Fall 2023	Stat 597(V)	5	5
Spring 2025	Stat 597(IV)	5	5
Spring 2025	Stat 565	5	5
Spring 2025	Stat 590	5	5

- Stat 597(I): Semiparametric Regression and its Applications (Special topic (and also new) course for Advanced graduate, Penn State)
- Stat 597(II): Local Modeling and its Applications (Special topic (and also new) course for Advanced graduate, Penn State)
- Stat 597 (III): Statistical Learning for High-dimensional Data and Applications (Special topic (and also new) course for Advanced graduate, Penn State)
- Stat 597 (IV): Statistical Foundations of Data Science (Special topic (and also new) course for Advanced graduate, Penn State)
- Stat 597 (V): Statistical Inference for High-dimensional Data (Special topic (and also new) course for Advanced graduate, Penn State)
- PHS 565: Statistical Models for Tobacco Research. A new course developed for students who are in the training program hosted by a NIH P50 center grant.

Stat 552: Linear Models (II)

Stat 590: Colloquium

Stat 525: Survival Data Analysis