Lianming Wang

Department of Statistics   Email: wangl@stat.sc.edu
University of South Carolina   Email: wang99@mailbox.sc.edu
209A LeConte College   Office: 803 - 777 - 6387
Columbia, SC 29208   Fax: 803 - 777 - 4048

Degrees

- Ph.D. in Statistics, 2006, University of Missouri - Columbia
- M.S. in Statistics, 2002, East China Normal University, P.R. China
- B.S. in mathematics 1999, Shandong University, P.R. China

Experience

- **Associate Professor, June 2015 – Present**
  Department of Statistics, University of South Carolina
- **Assistant Professor, August 2008 – June 2015**
  Department of Statistics, University of South Carolina

- **Graduate Director, August 2019 – July 2022**
  Department of Statistics, University of South Carolina
- **Research Fellow, August 2006 - August 2008**
  Biostatistics Branch, National Institute of Environmental Health Sciences
- **Graduate Teaching/Research Assistant, August 2002 - July 2006**
  Department of Statistics, University of Missouri - Columbia

Research Interests

- Survival analysis
- Longitudinal data analysis
- Multivariate analysis
- Semiparametrics and nonparametrics
- Bayesian computing
- Biomedical applications

Teaching Experiences

- STAT 740: Statistical Computing (Falls 2024, 2022, 2021, 2019, 2015, 2013; Springs 2012, 2010)

- STAT 509: Statistics for Engineers (Falls 2024, 2023, 2022, 2020, 2019, 2017, 2016, 2015,

2011, 2010, 2009; Spring 2024, 2023, 2022, 2020, 2019, 2017, 2016, 2009)

- STAT 771: Applied Longitudinal Data Analysis (Springs 2023, 2021, 2019, 2017, 2015)
- STAT 761: Reliability and Life Testing (Falls 2021, 2017)
- STAT 517: Advanced Statistical Models (Falls 2020, 2018, 2014)
- STAT 515: Statistical Methods (Falls 2018, 2016, 2014, 2013, 2012, 2011; Springs 2016, 2013, 2012)
- STAT 823: Large Sample Theory (Spring 2014)
- STAT 201: Elementary Statistics (Fall 2012)
- STAT 540: Computing in Statistics (Fall 2023, 2010; Spring 2024)
- STAT 511: Probability (Fall 2008)

Refereed Journal Articles/Book Chapters

- L. Wang, C. Wang, X. Lin, and **L. Wang** (2024). "Bayesian regression analysis of panel count data under frailty nonhomogeneous Poisson process model with an unknown frailty distribution". Electronic Journal of Statistics 18:3687-3705.

- S. Li, T. Hu, **L. Wang**, C. McMahan, and J. Tebbs (2024). "Regression Analysis of Group-Tested Current Status Data". Biometrika 111:1047–1061.

- M. Chakrabarti, K. Jiao, J.D. Potts, **L. Wang**, S. Branch, S. Harrelson, S. Khan, Mohamad Azhar (2023). "Hippo signaling mediates TGFß-dependent transcriptional inputs in cardiac cushion mesenchymal cells to regulate extracellular matrix remodeling". Journal Cardiovascular Development and Disease 10(12):483.

- W. Zhang, Z. Ma, **L. Wang**, D. Fan and Y. Ho (2023). "Genome-wide search algorithms for identifying dynamic gene co-expression via Bayesian variable selection ". Statistics in Medicine 42:5616–5629.

- P. Withana Gamage, C. McMahan, **L. Wang** (2023). "A flexible parametric approach for analyzing arbitrarily censored data that are potentially subject to left truncation under the proportional hazards model". Lifetime Data Analysis. 29:188–212.

- L. Sun, S. Li, **L. Wang**, X. Song, M. Sui (2022). "Simultaneous variable selection for joint models of multivariate interval-censored data". Biometrics 78:1402–1413.

- C. Pan, B. Cai, **L. Wang**, and X. Lin (2022). "ICBayes: A package of Bayesian semiparametric regression for interval-censored data". Communications in Statistics - Simulation and Computation. 51:1852-1866.

- L. Wang and **L. Wang** (2022). "EM algorithm for analyzing right-censored data under the semiparametric proportional odds model". Communications in Statistics – Theory and Methods 51: 5284-5297.

- L. Wang, **L. Wang**, and X. Lin (2021) "Bayesian inferences for panel count data and interval-censored data with nonparametric modeling of the baseline functions". Edited in book "Bayesian Inference and Computation in Reliability and Survival Analysis" by Professors Yuhlong Lio, Ding-Geng (Din) Chen, Hon Keung Tony Ng and Tzong- Ru Tsai.

Pages: 299-321.

- L. Sun, S. Li, **L. Wang**, and X. Song (2021). "A semiparametric mixture model approach for regression analysis of partly interval-censored data with a cured subgroup". Statistical Methods in Medical Research. 2021 July Doi:10.1177/09622802211023985.

- L. Wang and **L. Wang** (2021). "Regression analysis of arbitrarily censored survival data under the proportional odds model". Statistics in Medicine. 40: 3724-3739. DOI: 10.1002/sim.8994

- C. Pan, B. Cai, and **L. Wang** (2020). "A Bayesian approach for analyzing partly interval-censored data under the proportional hazards model". Statistical Methods in Medical Research. Stat Methods Med Res. 2020 May 22:962280220921552. doi: 10.1177/0962280220921552.

- Q. Liu, J. Hodge, J. Wang, Y. Wang, **L. Wang**, U. Singh, Y. Li, Y. Yao, D. Wang, W. Ai, P. Nagarkatti, H. Chen, P. Xu, E.A. Murphy, and D. Fan (2020). "Emodin reduces breast cancer lung metastasis by suppressing macrophage-induced breast cancer cell epithelial mesenchymal transition and cancer stem cell formation". *Theranostics* 10:8365-8381. doi:10.7150/thno.45395.

- E. Gu, J. Zhang, W. Lu, **L. Wang**, F. Felizzi (2020). "Semiparametric Estimation of the Cure Fraction in Population-based Cancer Survival Analysis". Statistics in Medicine. 39: 3787–3805.

- L. Sun, S. Li, **L. Wang**, and X. Song (2019). "Variable selection in semiparametric non-mixture cure model with interval-censored failure time data: an application to the prostate cancer study". Statistics in Medicine. 38: 3026-3039.

- H. Wu, and **L. Wang** (2019). "Normal Frailty Probit Model for Clustered Interval-censored Failure Time Data". Biometrical Journal. 61: 827-840.

- P. Withana Gamage, C. McMahan, **L. Wang**, and W. Tu (2018). "A Gamma-frailty proportional hazards model for bivariate interval-censored data". Computational Statistics and Data Analysis. 128, 354-366.

- C. Pan, B. Cai, and **L. Wang** (2017). "Multiple frailty model for clustered interval-censored data with frailty selection". Statistical Methods in Medical Research. 2017 Jun; 26(3):1308-1322.

- **L. Wang**, C. McMahan, M. Hudgens, Z. P. Qureshi (2016). "A flexible, computationally efficient method for fitting the proportional hazards model to interval-censored data". Biometrics 72, 222-231.

- B. Yao, **L. Wang**, and X. He. (2016). "Semiparametric regression analysis of panel count data allowing for within-subject correlation". Computational Statistics and Data Analysis, 97: 47–59.

- N. Wang, **L. Wang,** and C. McMahan (2015). "Regression analysis of bivariate current status data under the Gamma-frailty proportional hazards model using the EM algorithm". Computational Statistics and Data Analysis. 83, 140-150.

- X. Lin, B. Cai, **L. Wang** and Z. Zhang (2015). "A Bayesian proportional hazards model for general interval-censored data". Lifetime Data Analysis. 21: 470-490.

- C. Pan, B. Cai, **L. Wang**, and X. Lin (2014). "Bayesian semi-parametric model for spatial interval-censored survival data". Computational Statistics and Data Analysis. 74, 198-208.
- C. McMahan, **L. Wang**, and J. Tebbs (2013). "Regression analysis for current status data using EM algorithm". Statistics in Medicine, 32, 4452–4466.
- **L. Wang,** X. Lin, and B. Cai (2012). "Bayesian semiparametric regression analysis of interval-censored data with monotone splines" in *Interval-Censored Time-to-Event Data: Methods and Applications*, eds. D. Chen, J. Sun, and K. Peace, 149-165.
- **L. Wang** and X. Lin (2011). "A Bayesian approach for analyzing case 2 interval-censored failure time data under the semiparametric proportional odds model". Statistics and Probability Letters, 81, 876-883.
- X. Lin and **L. Wang** (2011). "Bayesian proportional odds models for analyzing current status data: univariate, clustered, and multivariate". Communications in Statistics - Simulation and Computation, 40, 1171-1181.
- B. Cai, X. Lin, and **L. Wang** (2011). "Bayesian proportional hazards model for current status data with monotone splines". Computational Statistics and Data Analysis, 55, 2644-2651.
- **L. Wang** and D. Dunson (2011). "Semiparametric Bayes proportional odds models for current status data with under-reporting". Biometrics, 67, 1111-1118.
- **L. Wang** and D. Dunson (2011). "Bayesian isotonic density regression". Biometrika, 98, 537-551.
- **L. Wang** and D. Dunson (2011). "Fast Bayesian inference in Dirichlet process mixture models". Journal of Computational and Graphical Statistics, 20, 196-216.
- X. Lin and **L. Wang** (2010). "A semiparametric probit model for case 2 interval-censored failure time data". Statistics in Medicine, 29, 972-981.
- **L. Wang** and D. Dunson (2010). "Semiparametric Bayes multiple testing: application to tumor data". Biometrics, 66, 493-501.
- **L. Wang**, J. Sun, and X. Tong (2010). "Regression analysis of case II interval-censored failure time data with the additive hazards model". Statistica Sinica, 20, 1709-1723.
- **L. Wang,** J. Sun, and X. Tong (2008). "Efficient estimation for bivariate current status data". Lifetime Data Analysis, 14, 134-153.
- **L. Wang,** L. Sun, and J. Sun (2006). "A goodness-of-fit test for the marginal Cox model for correlated interval-censored failure time data". Biometrical Journal, 5, 1-9.
- L. Sun, **L. Wang**, and J. Sun (2006). "Estimation of the association for bivariate interval-censored failure time data". Scandinavian Journal of Statistics, 33, 637-649.

Grant Support

- R01CA218578, Emodin as a Chemopreventive Agent for Breast Cancer. PI: Dr. Daping Fan (Department of Cell Biology & Anatomy), my role: co-investigator. Amount: $1,871,344. Funding period: 04/01/2018 - 03/31/2023.
- R21CA216230, Impact of macrophage PCSK9 on breast cancer. PI: Daping Fan. Role: Co-investigator. Amount: $293,700. Funding period: 03/01/2017 - 04/30/2019.
- Title: Establishing Screening Strategies for Prostate Cancer Patients. USC ASPIRE II grant. 11550-15-39357. PI: Dr. Zaina Qureshi. My role: co-PI. Amount: $99,786. Funding period: May 2015 – January 2017.
- Title: Statistical methodological development for sexually transmitted infections. USC Social Science Grant Program. 13080-13-31713. Role: PI. Amount: $19,026. Funding period: May 2013 - August 2015.

Professional Society

- American Statistical Association
- International Biometric Society (East Northern American Region)
- International Chinese Statistical Association

Statistics Journal Reviewer

- American Journal of Epidemiology
- Annals of the Institute of Statistical Mathematics
- Bayesian Analysis
- Biometrical Journal
- Biometrics
- Biostatistics
- BMC Endocrine Disorders
- Canadian Journal of Statistics
- Communications in Statistics - Simulation and Computation
- Communication in Statistics - Theory and Methodology
- Computational Statistics and Data Analysis
- Computer Methods and Programs in Biomedicine
- Current Bioinformatics
- Electronic Journal of Statistics
- Frontiers in Public Health
- International Journal of Biostatistics
- Journal of Agricultural, Biological and Environmental Statistics
- Journal of Applied Statistics
- Journal of Biometrics and Biostatistics
- Journal of Computational and Graphical Statistics
- Journal of Econometrics

- Journal of the American Statistical Association
- Journal of the Royal Statistical Society Series C
- Journal of Statistical Computation and Simulation
- Journal of Statistical Distributions and Applications
- Journal of Statistical Planning and Inference
- Journal of Statistical Theory and Practice
- Journal of Systems Science and Complexity
- Lifetime Data Analysis
- Metrika
- PLOS ONE
- Scandinavian Journal of Statistics
- SCIENCE CHINA Mathematics
- Statistica Sinica
- Statistical Computing
- Statistical Methods in Medical Research
- Statistics and Its Interface
- Statistics and Probability Letters
- Statistics in Medicine
- TEST
- The Open Epidemiology Journal

Department/University Service

- Faculty Mentor for Shanghong Xie, Department of Statistics, USC, August 2024 – present.
- Department's 40th Anniversary Planning Committee, August 2024 – present.
- Graduate Committee, Department of Statistics, USC, August 2024 – present.
- Faculty Senator, Department of Statistics, USC, August 2022 – May 2024.
- Faculty Hiring Committee, Department of Statistics, USC, August 2023 – February 2024.
- Chair Search Committee, Department of Statistics, USC, December 2023 – January 2024.
- Graduate Committee, Department of Statistics, USC, August 2019 – July 2023.
- Graduate Director, Department of Statistics, USC, August 2019 – July 2022.
- Faculty Senator, Department of Statistics, USC, September 2018 – August 2020.
- Chair Search Committee, Department of Statistics, USC, March 2019 – April 2019.
- Colloquium Director, Department of Statistics, USC, June 2016 – May 2019.
- Research Seminar Chair, Department of Statistics, USC, August 2012 – May 2019.
- Undergraduate Advisory Committee, Department of Statistics, USC, August 2010 – May 2019.
- Qualifying Exam Committee (PhD and Masters), Department of Statistics, USC
- Grievance Committee, Department of Statistics, USC, August, 2009 – August 2019.
- Computer Committee, Department of Statistics, USC, August, 2009 - August, 2010.

- Library Representative, Department of Statistics, USC, August, 2008 - August, 2010.

Graduate Student Advisees

- Shuqi Song, PhD candidate 2022 – present
- Zhixin Chen, PhD candidate 2022 – present
- Jihyun Kim, PhD candidate 2020 – present
- Yuchen Mao, PhD 2024
- Tuan Do, PhD 2020 (co-advisee)
- Ennan Gu, PhD 2020
- Lu Wang, PhD 2020
- Yifan Zhang, PhD 2019
- Qiang Zheng, PhD 2019
- Sean Wang, PhD 2017
- Bin Yao, PhD 2016
- Haifeng Wu, PhD 2016
- Naichen Wang, PhD 2014

Other Graduate Student Committees

- Qingyuan Hong, PhD candidate (member) 2024- present
- Zile Zhao, PhD candidate (member) 2023- present
- Yizeng Li, PhD candidate (member) 2023- present
- Yun Yang, PhD 2024 (member)
- Qingyang Liu, PhD 2023 (member)
- Yang He, PhD 2023 (member)
- Zhen Yang, PhD 2022 (member)
- Wenda Zhang, PhD 2022 (member)
- Shan Zhong, PhD 2022 (member)
- Thomas Hamori PhD candidate 2021 (outside member)
- Lili Tong, PhD 2021 (member)
- Chunling Wang, PhD 2020 (member)
- Sarah Sullivan, PhD 2019 (outside member)
- Xichen Mou, PhD 2019 (member)
- Yawei Liang, PhD 2019 (member)
- Xinchu Zhao, PhD 2018 (member)
- Hamad Alzamanan, PhD,2018 (outside member)
- Shiwen Shen, PhD 2018 (member)

- Qianqian Wang, PhD 2018 (member)
- Jianhong Wang, PhD 2018 (member)
- Jeremy Faulkenburg, PhD 2017 (outside member)
- Beidi Qiang, PhD 2017 (member)
- Jianxuan Liu, PhD 2017 (member)
- Piejie Hou, PhD 2017 (member)
- Piaomu Liu, PhD 2016 (member)
- Zizhen Wu, PhD 2016 (member)
- Md Shamim Sarker, PhD 2016 (member)
- Junshu Bao, PhD 2016 (member)
- Xin Tong, PhD 2016 (outside member)
- Shun Yu, PhD 2015 (member)
- Yin Fu, PhD 2015 (member)
- Norazaliza Mohd Jamil, PhD 2015 (outside member)
- Fazlur Rahman, PhD 2014 (member)
- Li Li, PhD 2014, (member)
- Chun Pan, PhD 2013 (outside member)
- Christopher McMahan, PhD 2012 (member)
- Yuhui Chen, PhD 2012 (member)
- Xiao Xiao, PhD 2012 (outside member)
- Treena Basu, PhD 2012 (outside member)
- Craig Whitlow, MIS 2010 (member)
- Linzhi Xu, PhD 2010 (outside member)

Updated on September 24, 2024