

Curriculum Vitae

Personal Information

Name: Yanqing Sun
E-mail: yasun@charlotte.edu
Web page: <https://webpages.charlotte.edu/~yasun/>
Telephone: (mobile) 980-297-0002, (home) 704-598-9442

Education

Wuhan University of Technology, China	Sept. 1978 – July 1982	B.S. in Mathematics
Huazhong Univ. of Science & Tech., China	Sept. 1982 – May 1985	M.S. in Applied Math.
Florida State University	Aug. 1988 – Dec. 1992	Ph.D in Statistics
University of Rochester	March 1993 – June 1994	Postdoc. in Biostatistics

Research Interests

Univariate and multivariate failure time data, competing risks data, recurrent events and longitudinal data, interval censored data, missing data, measurement errors, estimation and hypothesis testing, empirical likelihood inferences, semiparametric and nonparametric failure time regression, quantile regression, problems arising from the HIV, dengue, COVID-19 and malaria vaccine efficacy trials.

Academic Positions

2005- Full Professor, Dept. of Mathematics and Statistics, UNC Charlotte
2000-2005 Associate Professor, Dept. of Mathematics and Statistics, UNC Charlotte
1994-2000 Assistant Professor, Dept. of Mathematics and Statistics, UNC Charlotte
1995-1996 Contract Statistician, Centers for Disease Control and Prevention, Atlanta
2005.5-2005.7 Visiting Professor, Dept. of Biostatistics, University of Copenhagen, Denmark;
1998.5-1998.7; 2001.5-2001.7; 2002.7-2002.12 Visiting Scientist Frontier Science and Technology Research Foundation, Boston.
Instructor, East China Institute of Technology, China, May 1985 – July 1987

Honors and Awards

- Elected fellow of the American Statistical Association 2013.
- Elected member of International Statistical Institute 2007.
- Permanent member of International Chinese Statistical Association 2007.
- The NIH MERIT (Method to Extend Research in Time) award to the project “Statistical Methods in HIV Vaccine Efficacy Trials,” 2011–2020 (Co-Principal Investigator).
- The NIH MERIT award to the project “Statistical Methods for Efficacy Trials of Vaccines and Monoclonal Antibodies Against Genetically-Diverse Pathogens,” 2020–2029 (Co-Principal Investigator).

- The Ralph A. Bradley student award in recognition of outstanding achievement as a graduate student in 1993, Department of Statistics, FSU.
- Recognition of the paper “Analysis of two-phase sampling data with semiparametric additive hazards models” as one of the top cited papers in Lifetime Data Analysis 2018.
- The paper, entitled “A Semiparametric Cox-Aalen Transformation Model with Censored Data” (Biometrics, 2023), presented by my former doctoral student, Xi Ning, received the 2023 International Biometric Society Eastern North American Region (ENAR) Distinguished Student Paper Awards.
- The paper, entitled “Analysis of the Cox model with longitudinal covariates with measurement errors and partly interval censored failure times, with application to an AIDS clinical trial” (Statistics in Biosciences, 2023), received the 2024 *Statistics in Biosciences* Best Paper Awards.

Grants Awarded

- Co-Principle investigator (UNCC PI) of NIAID NIH grant, R37 AI054165 Extension, 07/01/2024 – 06/30/2029, on “Statistical Methods for Efficacy Trials of Vaccines and Monoclonal Antibodies Against Genetically-Diverse Pathogens”. PI: Dr. Peter B. Gilbert from Statistical Center for HIV/AIDS Research and Prevention, Fred Hutchinson Cancer Center.
- Principle investigator of the subcontract from Fred Hutchinson Cancer Center, “Longitudinal modeling of the dependency of the intensity of malaria infection on previous vaccinations and infection history,” 10/1/2023-12/31/2023. Amount awarded to UNCC: \$48,545.
- Co-Principle investigator (UNCC PI) of the NIAID NIH grant, 2 R37 AI054165-22, 07/01/2020 – 06/30/2024, on “Statistical Methods for Efficacy Trials of Vaccines and Monoclonal Antibodies Against Genetically-Diverse Pathogens”. Amount awarded to UNCC: \$399,477. PI: Dr. Peter B. Gilbert from Statistical Center for HIV/AIDS Research and Prevention, Fred Hutchinson Cancer Center.
- Principle investigator of the NSF grant DMS1915829, 9/1/2019–8/31/2023, on “Dynamic Modeling of Recurrent Events and Its Applications”. Amount \$139,868.
- Co-Principle investigator (UNCC PI) of NIH grant R37 AI054165, 4/1/2010–3/31/2020, on “Statistical Methods in HIV Vaccine Efficacy Trials”. Amount awarded to UNCC: \$910,032. PI: Dr. Peter B. Gilbert from Statistical Center for HIV/AIDS Research and Prevention, Fred Hutchinson Cancer Research Center.
- Principle investigator of the NSF grant DMS1513072, 9/1/2015–8/31/2018, on “Generalized Semiparametric Varying-Coefficient Models for Longitudinal Data”. Amount \$119,999.
- Principle investigator of the NSF grant DMS1208978, 9/1/2012–8/31/2015, on “Generalized Semiparametric Regression with Longitudinal Data”. Amount \$120,000.
- Principle investigator of the NSF grant DMS0905777, 9/1/2009–8/31/2012, on “Efficient Analysis of Competing Risks Models with Missing Data”. Amount \$120,000.

- Principle investigator of the NSF grant DMS0604576, 7/1/2006–6/30/2009, on “Some New Developments in Competing Risks Models – Extensions and Applications”. Amount \$119,999.
- Co-Principle investigator (UNCC PI) of NIH grant 2 R01 AI054165-04, 4/1/2006–3/31/2010, on “Statistical Methods in HIV Vaccine Efficacy Trials”. Amount awarded to UNCC: \$223,402. PI: Dr. Peter B. Gilbert from Statistical Center for HIV/AIDS Research and Prevention, Fred Hutchinson Cancer Research Center.
- Principle investigator of the NSF grant DMS-0304922, 7/1/2003–6/30/2006, on “Semiparametric Regression Modeling for Longitudinal Data”. Amount \$145,334.
- Co-principal investigator of the NSF grant DMS-0215443, 8/15/2002–7/31/2005, on “Scientific Computing Research Environments for the Mathematical Sciences (SCREMS) - Beowulf Linus Cluster Project”.
- Co-principal investigator of the NSF grant for computer equipment, 1995. Amount \$21,549.50.
- UNCC faculty research grants received in 1995, 1997, 1999, 2001 and 2006.
- UNCC CLAS Reassignment of Duties received in Fall 2002, Spring 2009, Fall 2014, Fall 2022.

Publications (* denotes student/formal student/advisee)

- [1] Heng, F*, **Sun, Y.**, Li, L. and Gilbert, P. B. (2025). Estimation and hypothesis testing of strain-specific vaccine efficacy with missing strain types, with application to a COVID-19 vaccine trial. *Statistics in Medicine*, 44: e10345. <https://doi.org/10.1002/sim.10345>.
- [2] Ning, X.*, **Sun, Y.**, Pan, Y. and Gilbert, P. (2025). Regression analysis of semiparametric Cox-Aalen transformation models with partly interval-censored data. *Electrical Journal of Statistics* **19**, No. 1, 240–290. doi: 10.1214/24-EJS2341.
- [3] Magaret, C.A., Li, L., deCamp, A.C., Rolland, M., Juraska, M., Williamson, B.D., Ludwig, J., Cindy Molitor, Benkeser, D., Luedtke, A., Simpkins, B., Heng, F*, **Sun, Y.**, et al. (2024). Quantifying how single dose Ad26.COV2.S vaccine efficacy depends on Spike sequence features. *Nature Communications* **15**, 2175. <https://doi.org/10.1038/s41467-024-46536-w>.
- [4] Qu, L., Sun, L. and **Sun, Y.** (2024). A mark-specific quantile regression model. *Biometrika*. **111**, 255–272.
- [5] Ning, X.*, Pan, Y., **Sun, Y.** and Gilbert, P. (2023). A semiparametric Cox-Aalen transformation model with censored data. *Biometrics*. **79**, 3111–3125.
- [6] **Sun, Y.**, Zhou, Q. and Gilbert, P.B. (2023). Analysis of the Cox model with longitudinal covariates with measurement errors and partly interval censored failure times, with application to an AIDS clinical trial. *Statistics in Biosciences* **15**(2), 430–454.
- [7] **Sun, Y.**, Shou, Q.*, Heng, F.*, Gilbert, P.B. and Qian, X. (2023). Semiparametric additive time-varying coefficients model for longitudinal data with censored time origin. *Biometrics* **79**, 695–710.
- [8] **Sun, Y.**, Heng, F.*, Lee, U.* and Gilbert, P.B. (2023). Estimation of conditional cumulative incidence functions under generalized semiparametric regression models with missing covariates, with applications to analysis of biomarker correlates in vaccine trials. *The Canadian Journal of Statistics* **51**(1), 235–257.

- [9] Qi, L.*, **Sun, Y.**, Juraska, M., Moodie, Z., Magaret, C.A., Heng, F.*, Carpp, L.N. and Gilbert, P.B. (2022). Neutralizing Antibody Correlates of Sequence Specific Dengue Disease in a Tetravalent Dengue Vaccine Efficacy Trial in Asia. *Vaccine*, **40** (41) 5912–23. doi: 10.1016 /j.vaccine.2022.08.055.
- [10] **Sun, Y.** and Fang, F.* (2022). Profile estimation of generalized semiparametric varying-coefficient additive models for longitudinal data with within-subject correlations. Chapter 8, pages 159–179, in ICSA Book Series in Statistics titled “*Advances and Innovations in Statistics and Data Science*”. Co-Editors: Wenqing He, Liquan Wang, Jiahua Chen and Chunfang Devon Lin. Series ISSN 2199-0980, Springer International Publishing, New York. <https://doi.org/10.1007/978-3-031-08329-7>. ISBN: 978-3-031-08328-0.
- [11] Zhou, Q., **Sun, Y.** and Gilbert, P.B. (2021). Semiparametric Regression Analysis of Partly Interval-Censored Failure Time Data with Application to An AIDS Clinical Trial. *Statistics for Medicine*, **40** 4376–4394. DOI: 10.1002/sim.9035. PMCID: PMC9080514.
- [12] Li, S., **Sun, Y.**, Diao, L. and Wang, X. (2021). Distance-based analysis with quantile regression models. *Statistics in Biosciences* **13**, 291–312. DOI: 10.1007/s12561-021-09306-6. NIHMSID: 1799146. PMCID: PMC9285981.
- [13] Han, D., Qu, L., Sun, L. and **Sun, Y.** (2021). Variable selection for the mark-specific additive hazards model using the adaptive Lasso. *Statistical Methods in Medical Research*, **30** 2017–2031. DOI: 10.1177/09622802211023957. PMID: 34266342 PMCID: PMC9140222.
- [14] **Sun, Y.**, Qi, L.*, Heng, F.* and Gilbert, P.B. (2020). A Hybrid Approach for the Stratified Mark-Specific Proportional Hazards Models with Missing Covariates and Missing Marks, with Applications to Dengue Vaccine Efficacy Trials. *Journal of the Royal Statistical Society, Series C (Applied Statistics)*, **69**, 791–814. PMCID: PMC7664296.
- [15] Heng, F.*, **Sun, Y.**, Hyun, S.*, and Gilbert, B.P. (2020). Analysis of the time-varying Cox model for cause-specific hazard functions with missing causes, *Lifetime Data Analysis*, **26**, 731–760. PMCID: PMC7487047.
- [16] **Sun, Y.**, Qi, L.*, Heng, F.* and Gilbert, P.B. (2019). Analysis of generalized semiparametric mixed varying-coefficient effects models for longitudinal data. *The Canadian Journal of Statistics*, **47**, 352–373. PMCID: PMC6905629.
- [17] **Sun, Y.**, Zhang, Y.* and Huang, J. (2019). Estimation of a semiparametric varying-coefficient mixed regressive spatial autoregressive model. *Econometrics and Statistics*, **9**, 140–155. PubMed Central PMCID: PMC6364846.
- [18] Qi, L., Zhang, X., **Sun, Y.**, Wang, L. and Zhao, Y. (2019). Weighted estimating equations for additive hazards models with missing covariates. *Annals of the Institute of Statistical Mathematics (AISM)*, **71**, 365–387. PMCID: PMC6748657
- [19] Li, Y., Qi, L.* and **Sun, Y.** (2018). Semiparametric varying-coefficient regression analysis of recurrent events with applications to treatment switching. *Statistics in Medicine*, **37**, 3959–3974. PMCID: PMC6754098.
- [20] Lee, U.*, **Sun, Y.**, Scheike, T. and Gilbert, P. B. (2018). Analysis of generalized semiparametric regression models for the cumulative incidence functions with missing covariates. *Computational Statistics & Data Analysis*, **122**, 59–79. PubMed Central PMCID: PMC5993453.
- [21] **Sun, Y.**, Qi, L.*, Yang, G. and Gilbert, P. B. (2018). Hypothesis tests for stratified mark-specific proportional hazards models with missing covariates, with application to HIV vaccine efficacy trials. *Biometrical Journal*, **60**, 516–536. PubMed Central PMCID: PMC6447062.

- [22] Yang, G., Hou, S., Wang, L. and **Sun, Y.** (2018). Feature screening in ultrahigh dimensional additive Cox model. *Journal of Statistical Computation and Simulation* **88**, 1117–1133. PubMed Central PMCID: PMC6812560.
- [23] Diao, K., **Sun, Y.**, Yoo, S.K., Yu, C., Ye, J.C., Trakul, N., Jennelle, R.L., Kim, P.E., Zada, G., Gruen, J.P. and Chang, E.L. (2018). Safety-net versus private hospital setting for brain metastasis patients treated with radiosurgery alone: disparities in follow-up care and outcomes. *Cancer*, **124**, 167–175.
- [24] Qi, L.* , **Sun, Y.** and Gilbert, P. B. (2017). Generalized semiparametric varying-coefficient model for longitudinal data with applications to adaptive treatment randomizations. *Biometrics*, **73**, 441–451. PubMed Central PMCID: PMC5459686.
- [25] **Sun, Y.** and Hyun, S.* (2017). Introduction to “Efficient estimation of fixed and time-varying covariate effects in multiplicative intensity models”, Chapter 13, *Inference, Asymptotics, and Applications: Selected Papers of Ib Michael Skovgaard, with Introductions by his Colleagues*, 1st Edition, edited by Nancy Reid and Torben Martinussen. *World Scientific Publishing Co., Singapore*.
- [26] Yang, G., **Sun, Y.**, Qi, L.* and Gilbert, P. B. (2017). Estimation of stratified mark-specific proportional hazards models under two-phase sampling with application to HIV vaccine efficacy trials. *Statistics in Biosciences*, **9**, 259–283. PubMed Central PMCID: PMC5540271.
- [27] Han, D., Sun, L., **Sun, Y.** and Qi, L.* (2017). Mark-specific additive hazards regression with continuous marks. *Lifetime Data Analysis*, **23**, 467–494. PubMed Central PMCID: PMC5319915.
- [28] **Sun, Y.**, Qian, X., Shou, Q.* and Gilbert, P. B. (2017). Analysis of two-phase sampling data with semiparametric additive hazards models. *Lifetime Data Analysis*, **23**, 377–399. PubMed Central PMCID: PMC5309201.
- [29] Yang, G., **Sun, Y.** and Cui, X. (2017). Automatic structure discovery for varying-coefficient partially linear models. *Communications in Statistics – Theory and Methods*, **46**, 7703–7716. PubMed Central PMCID: PMC5540271.
- [30] **Sun, Y.**, Li, M.* and Gilbert, P. B. (2016). Goodness-of-fit of stratified proportional hazards models with continuous marks. *Computational Statistics and Data Analysis*, **93**, 348–358. PubMed Central PMCID: PMC4598956.
- [31] Li, Y. and **Sun, Y.** (2016). Semiparametric random effects models for longitudinal data with informative observation times. *Statistics and Its Interface*, **9** 333–341. PubMed Central PMCID: PMC5431605
- [32] Diao, Y., Hinson, K., **Sun, Y.** and Arsuaga, J. (2015). The effect of volume exclusion on the formation of DNA minicircle networks: implications to kinetoplast DNA. *Journal of Physics A: Mathematical and Theoretical*. **48**, Issue 43, article id. 435202.
- [33] Zhang, Y.* and **Sun, Y.** (2015). Estimation of partially specified dynamic spatial panel data models with fixed-effects. *Regional Science and Urban Economics*, **51** 37–46. PubMed Central PMCID: PMC5354173.
- [34] Ghosh, L.* , Jiang, J., **Sun, Y.** and Zhou, H. (2015). Failure time regression with continuous informative auxiliary covariates. *Journal of Statistical Distributions and Applications*, **2:2**. PubMed Central PMCID: PMC4651204.

- [35] Gilbert, P.B. and **Sun, Y.** (2015). Inferences on relative failure rates in stratified mark-specific proportional hazards models with missing marks, with application to HIV vaccine efficacy trials. *Journal of the Royal Statistical Society, Series C (Applied Statistics)*, **64** 49–73. PubMed Central PMCID: PMC4310507.
- [36] Qi, L.* and **Sun, Y.** (2014). Missing data approaches for probability regression models with missing outcomes with applications. *Journal of Statistical Distributions and Applications*, **1**:23. PubMed Central PMCID: PMC4757472.
- [37] **Sun, Y.**, Sun, L. and Zhou, J. (2013). Profile local linear estimation of generalized semiparametric regression model for longitudinal data. *Lifetime Data Analysis*, **19** 317–349. PubMed Central PMCID: PMC3710313.
- [38] **Sun, Y.**, Li, M.* and Gilbert, P. B. (2013). Mark-specific proportional hazards model with multivariate continuous marks and its application to HIV vaccine efficacy trials. *Biostatistics*, **14** 60–74. PubMed Central PMCID: PMC3520499.
- [39] Scheike, T. H. and **Sun, Y.** (2012). On cross-odds ratio for multivariate competing risks data. *Biostatistics*, **13** 680–694. PubMed Central PMCID: PMC3440240.
- [40] Hyun, S.* , Lee, J.* and **Sun, Y.** (2012). Proportional hazards model for competing risks data with missing cause of failure. *Journal of Statistical Planning and Inference*, **142** 1767–1779. PubMed Central PMCID: PMC3314432.
- [41] **Sun, Y.**, Wang, J. H. and Gilbert, P. B. (2012). Quantile regression for competing risks data with missing cause of failure. *Statistica Sinica*, **22** 703–728. PubMed Central PMCID: PMC3742132.
- [42] **Sun, Y.** and Gilbert, P. B. (2012). Estimation of stratified mark-specific proportional hazards models with missing marks. *Scandinavian Journal of Statistics*, **39** 34–52. PubMed Central PMCID: PMC3601495.
- [43] Lee, J.* , Scheike, T. H. and **Sun, Y.** (2011). Regression analysis in failure time mixture models with change points according to thresholds of a covariate. *Recent Advances in Biostatistics – False Discovery Rates, Survival Analysis, and Related Topics*, Series in Biostatistics, Vol. 4. World Scientific, New Jersey.
- [44] **Sun, Y.** and Lee, J.* (2011). Testing independent censoring for longitudinal data. *Statistica Sinica*, **21** 1315–1339. PubMed Central PMCID: PMC3749084.
- [45] **Sun, Y.** (2010). Estimation of semiparametric regression model with longitudinal data. *Lifetime Data Analysis*, **16** 271–298. PubMed Central PMCID: PMC3043558.
- [46] Scheike, T. H., **Sun, Y.**, Zhang, M.-J. and Jensen, T. K. (2010). A semiparametric random effects model for multivariate competing risks data. *Biometrika*, **97** 133–145. PubMed Central PMCID: PMC3633199.
- [47] Hyun, S.* , **Sun, Y.** and Sundaram, R. (2009). Assessing cumulative incidence functions under the semiparametric additive risk model. *Statistics in Medicine*, **28** 2748–68. PubMed Central PMCID: PMC2773213.
- [48] **Sun, Y.**, Sundaram, R. and Zhao, Y. (2009). Empirical likelihood inference for the cox model with time-dependent coefficients via local partial likelihood. *Scandinavian Journal of Statistics*, **36** 444–462. PubMed Central PMCID: PMC2762234.
- [49] **Sun, Y.**, Gilbert, P. B. and McKeague, I. W. (2009). Proportional hazards models with continuous marks. *The Annals of Statistics*, **37** 394–426. PubMed Central PMCID: PMC2762218.

- [50] **Sun, Y.**, Hyun, S.* and Gilbert, P. B. (2008). Testing and estimation of time-varying cause-specific hazard ratios with covariate adjustment. *Biometrics*, **64** 1070–1081. PubMed PMID: 18355384, NIHMSID: NIHMS1863432. PMCID: PMC9841889. PMID: 18355384.
- [51] Gilbert, P. B., McKeague, I. W. and **Sun, Y.** (2008). The two-sample problem for failure rates depending on a continuous mark: an application to vaccine efficacy. *Biostatistics*, **9** 263–276. PubMed PMID: 17704528.
- [52] Hyun, S.* and **Sun, Y.** (2007). Hypotheses tests of strain-specific vaccine efficacy adjusted for covariate effects. *Journal of Applied Statistics*, **34** 1065–1073.
- [53] Scheike T. H. and **Sun, Y.** (2007). Maximum likelihood estimation for tied survival data under cox regression model via em-algorithm. *Lifetime Data Analysis*, **13** 399–420. PubMed PMID: 17682942.
- [54] Brandon, W. P., Troyer, J. L., Sundaram, R., Schoeps, N., **Sun, Y.** and Walsh B. J. (2005). Medicaid switching among managed care plans. *Journal of Health Care for the Poor and Underserved*, **16** 760 – 779. PubMed PMID: 16311497.
- [55] Gilbert, P. B. and **Sun, Y.** (2005). Failure time analysis of HIV vaccine effects on viral load and treatment initiation. *Biostatistics*, **6** 374 – 394. PubMed PMID: 15831584.
- [56] **Sun, Y.** and Wu, H. (2005). Semiparametric time-varying coefficients regression model for longitudinal data. *Scandinavian Journal of Statistics*, **32** 21 – 47.
- [57] Gilbert, P. B. and **Sun, Y.** (2005). Simultaneous inferences of HIV vaccine effects on viral load, cd4 cell counts, and antiretroviral therapy initiation in phase 3 trials. Book Chapter in *Deterministic and Stochastic Models of AIDS and HIV with Intervention*, World Scientific, New Jersey.
- [58] Gilbert, P. B., McKeague, I. W. and **Sun, Y.** (2004). Tests for comparing mark-specific hazards and cumulative incidence functions. *Lifetime Data Analysis*, **10** 5 – 28. PubMed PMID: 15130048.
- [59] Cui, S.* and **Sun, Y.** (2004). Checking for the gamma frailty distribution under the marginal proportional hazards frailty model. *Statistica Sinica*, **14** 249–267.
- [60] **Sun, Y.** and Wu, H. (2003). AUC-based tests for nonparametric functions with longitudinal data. *Statistica Sinica*, **13** 593–612.
- [61] Cai, Z. and **Sun, Y.** (2003). Local linear estimation for time-dependent coefficients in Cox’s regression models. *Scandinavian Journal of Statistics*, **30**, 93–111.
- [62] **Sun, Y.**, Cui, S.* and Tiwari, R. C. (2002). Goodness-of-fit tests for parametric models based on biased samples. *Canadian Journal of Statistics*, **30**, 475–490.
- [63] **Sun, Y.** (2002). Book review for “Classical Competing Risks” by Martin Crowder, *Journal of the American Statistical Association*, Vol. 97, 1217–1217.
- [64] McKeague, I. W., Subramanian, S. and **Sun, Y.** (2001). Median regression and the missing information principle. *Journal of Nonparametric Statistics*, **13**, 709–727.
- [65] Diao, Y., Nardo, J. and **Sun, Y.** (2001). The global knottedness of equilateral random polygons. *Journal of Knot Theory and its Ramifications*, Vol. 10, No. 4, 597–607.
- [66] **Sun, Y.**, Tiwari, R. C. and Zalkikar, J. N. (2001). Goodness of Fit Tests for Multivariate Counting Process Models with Applications. *Scandinavian Journal of Statistics*, **28**, 241–256.

- [67] **Sun, Y.** (2001). Generalized nonparametric test procedures for comparing multiple cause-specific hazard rates. *Journal of Nonparametric Statistics* **13**, 171–207.
- [68] **Sun, Y.**, Sun, S. and Diao, Y. (2001). Smooth quantile processes from right censored data and construction of simultaneous confidence bands. *Communications in Statistics – Theory and Methods*, **30**, 707–727.
- [69] Li, G. and **Sun, Y.** (2000). A simulation-based goodness-of-fit test for survival data. *Statist. Probab. Letters*. **47**, 403–410.
- [70] **Sun, Y.**, Chow, S. C., Li, G. and Chen, K. W. (1999). Assessing distributions of estimated drug shelf-lives in stability analysis. *Biometrics* **55**, 896–899. PubMed PMID: 11315024.
- [71] Chen, K. W., Li, G., **Sun, Y.** and Chow, S. C. (1997). Interval estimation for ratios in bioequivalence trials. *Biometrical Journal* Vol. 39, 989–1002.
- [72] **Sun, Y.** (1997). Weak convergence of the generalized parametric empirical processes and goodness-of-fit tests for parametric models. *Comm. Statist. –Theory and Methods* Vol. 26, No. 10, 2393–2413.
- [73] **Sun, Y.** and Tiwari, R. C. (1997). Comparing cumulative incidence functions of a competing risks model. *IEEE Trans. Reliability*, Vol. 46, 247–253.
- [74] **Sun, Y.** and Sherman, M. (1996). Some permutation tests for survival data. *Biometrics*, Vol. 52, 87–97. PubMed PMID: 8934586.
- [75] McKeague, I. W. and **Sun, Y.** (1996). Transformations of Gaussian random fields to Brownian sheet and nonparametric change-point tests. *Statist. Probab. Letters*, Vol. 28, 311–319.
- [76] McKeague, I. W. and **Sun, Y.** (1996). Towards an omnibus distribution-free goodness-of-fit test for the Cox model. *Statistica Sinica*, Vol. 6, No. 3, 579–588.
- [77] Chen, K. W., Li, G., **Sun, Y.** and Chow, S. C. (1996). A confidence region approach for assessing equivalence in variability of bioavailability. *Biometrical J.* Vol. 38, 475–487.
- [78] McKeague, I. W., Nikabadze, A. M. and **Sun, Y.** (1995). An omnibus test for independence of a survival time from a covariate. *The Annals of Statistics*, Vol. 23, No. 2, 450–475.
- [79] Bushunow, P. W., **Sun, Y.**, Raubertas, R. and Rosenthal, S. (1995). Adjuvant chemotherapy does not affect employment in patients with early stage breast cancer. *Journal of General Internal Medicine*, Vol 10, 73–76. PubMed PMID: 7730942.
- [80] **Sun, Y.** and Tiwari, R. C. (1995). Comparing cause-specific hazard rates of a competing risks model with censored data. *Analysis of Censored data, IMS Lecture Notes-Monograph Series*, Vol. 27, 255–270. Institute of Mathematical Statistics, Hayward, CA.
- [81] **Sun, Y.** (1986). Comments on ‘The Stability of Linear Time-Varying Systems’. *Int. J. Control*, Vol 43, No 4, 1337–1338.
- [82] **Sun, Y.** (1985). Explicit solutions for a class of nonlinear filtering problems of Markov–Gauss processes. *Academic Journal of Huazhong Univ. of Sci. and Tech.*, Vol 13, No.2, 99–104.

Software Development

R package “cmprskPH” for the paper “Estimation and Hypothesis Testing of Strain-Specific Vaccine Efficacy with Missing Strain Types with Applications to a COVID-19 Vaccine Trial”, by Fei Heng (f.heng@unf.edu), Yanqing Sun (yasun@uncc.edu), and Peter B. Gilbert, is posted on Github.

Collaborative Researches and Consulting Activities

- Developed statistical methods and software package for evaluating the vaccine efficacy and its dependence on virus sequence for Moderna’s COVID-19 vaccine trial.
- Participated Drafting of Statistical Analysis Plan for: Molecular Detection and Genotyping of *Plasmodium falciparum* Parasites in Young African Children after Immunization with RTS,S/AS01E Malaria Vaccine Protocol Number: 206213 (MALARIA-095), 2021.
- Served as a senior statistical consultant for several grant applications for NIH and the National Library of Medicine (NLM).
- Statistical consulting for Marketing & Practice Relations Director, Charlotte Radiology, 2012.
- Statistical consulting for The Dermatology Research Institute, Chongqing Hospital of Chinese Medicine, Chongqing, China, 2013.
- Statistical consultant (2003–2006) and Co-PI (2006–2015) for NIH sponsored project “Statistical Methods in HIV Vaccine Efficacy Trials”, with the principle investigator Peter Gilbert at the Statistical Center for HIV/AIDS Research and Prevention, Fred Hutchinson Cancer Research Center.
- Collaborative researches on HIV viral dynamics modeling with Dr. Hulin Wu during my visits to the Frontier Science Foundation of Technology in Boston in May – July, 1998, May – July, 2001 and July – December, 2002.
- Statistical consulting for MedCath, Inc. in 2000 on analysis of hospital data.
- Statistical consulting for the North Carolina State Medicaid Project, “The contract to evaluate Medicaid mandatory managed care program in Mecklenburg county for the North Carolina division of medical assistance” in 1997 and 1998.
- Statistical consultant for Vaccine Safety Datalink (VSD) project by the National Immunization Program, Centers for Disease Control and Prevention in Atlanta during September, 1995–July, 1996.
- During my appointment as a postdoctoral fellow in the University of Rochester, I participated in the consulting activities of the Department of Biostatistics. I cooperated with medical researchers in the design and statistical analysis of several clinical studies.
 - Study of women’s employment after treatment for early stage breast cancer.
 - Study of effectiveness of the treatments for conscious sedation.
 - Study of the treatments for incontinence in women.
- Other consulting activities:
 - Statistical consulting for The Dermatology Research Institute, Chongqing Hospital of Chinese Medicine, Chongqing, China, on a research project in the area of dermatology involving clinical trials to evaluate the traditional Chinese medicine and its combined treatments with the Western medicine.
 - Statistical consultant for NSF/NIH (joint program) grant proposal, “Collaborative Research: Linking it all Together: Using Knot Theory and Biochemical Experimentation to Determine the Topology of Kinetoplast DNA,” PIs: J Arsuaga, Y Diao, M Klingbell and L Zechiedrich.

- Statistical consultant for NSF grant proposal, “Collaborative Research: Exploring Potential Packing Mechanisms Using Confined Random Polygon Models,” PIs: Y Diao, C Ernst and U Ziegler.
- Statistical consultant for NSF sponsored project (DMS-0920880, 2009-2013) “Collaborative Research: Topological Characterization of DNA Organizations in Bacteriophage Capsids,” at UNC Charlotte and San Francisco State University.
- Statistical consultant for NSF sponsored project (DMS-1016460, 2010-2013) “Collaborative Research: A Study of the Transition of Knot Space from Confinement to Relaxation,” at UNC Charlotte and Western Kentucky University.
- Various statistical consultings for the faculty and graduate students at UNC Charlotte, Katz healthcare service, Hunt Manufacturing, an financial consulting firm in Charlotte and Bank of America.

Teaching

- **Undergraduate Courses Taught** *STAT1220/STAT1222: Elementary Statistics; STAT1223: Regression Analysis; STAT2122: Probability and Statistics for Engineers, STAT3128: Probability and Statistics for Engineers, STAT3125: Statistical Techniques; STAT3122: Probability and Statistics I; STAT3123: Probability and Statistics II.*
- **Graduate Courses Taught.** Course titles/Topics: *Theory of Probability and Statistics I; Theory of Probability and Statistics II; Survival and Event History Analysis; Asymptotic Statistics; Advanced Probability; Categorical Data Analysis; Introduction to Biostatistics.*
- **Short Courses Taught.** One one-week course in 2008 and two three-weeks courses in 2011 and 2012 on “Survival and Event History Data Analysis at Shanghai University of Finance and Economics, China. Two-days course on “Introduction to Survival Analysis” in Department of Mathematics, Zhejiang University, China, 2010.
- **Independent Studies Offered** *Regression and Modeling with Applications; Counting Processes and Survival Analysis; Applied Logistic Regression; Convergence of Probability Measures; Statistical Methods in Longitudinal Data Analysis.*
- **Ph.D. Dissertations Supervised**
 - (1) *Model Checking for Multivariate Correlated Failure Times*, Sufang Cui, Year 2001. UNC Charlotte Electronic Theses and Dissertations.
 - (2) *Statistical Analysis of Competing Risks Models with Applications*, Seunggeun Hyun, Year 2007. UNC Charlotte Electronic Theses and Dissertations.
 - (3) *Some Statistical Methods for Failure Time Data*, Jimin Lee, Year 2008. UNC Charlotte Electronic Theses and Dissertations.
 - (4) *Analysis of Failure Time Data with Missing and Informative Auxiliary Covariates*, Lipika Ghosh, Year 2011. (Joint supervision with Prof. Jiancheng Jiang). UNC Charlotte Electronic Theses and Dissertations. Technical Report Series Preprint no. 2011-07.
 - (5) *Statistical Analysis of Mark-Specific Proportional Hazards Model*, Mei Li, Year 2011. UNC Charlotte Electronic Theses and Dissertations. Technical Report Series Preprint no. 2011-09.

- (6) *Semiparametric Time-Varying Coefficient Regression Model for Longitudinal Data with Censored Time Origin*, Qiong Shou, Year 2012. UNC Charlotte Electronic Theses and Dissertations. Technical Report Series Preprint no. 2012-04.
- (7) *Generalized Semiparametric Varying-Coefficient Models for Longitudinal Data*, Li Qi, Year 2015.
- (8) *Analysis of Semiparametric Regression Models for the Cumulative Incidence Functions Under the Two-Phase Sampling Designs*, Unkyung Lee, Year 2016. UNC Charlotte Electronic Theses and Dissertations. Technical Report Series Preprint no. 2016-05.
- (9) *Improving Semiparametric Estimation of Longitudinal Data with Covariance Function*, Fang Fang, Year 2018. UNC Charlotte Electronic Theses and Dissertations. Technical Report Series Preprint no. 2018-04.
- (10) *Estimation of Semivarying Coefficient Models for Counting Processes with Applications*, Liqui Deng, Year 2019. UNC Charlotte Electronic Theses and Dissertations. Technical Report Series Preprint no. 2019-05.
- (11) *Dynamic Modeling of Incomplete Event History Data*, Fei Heng, Year 2019. UNC Charlotte Electronic Theses and Dissertations. Technical Report Series Preprint no. 2019-08.
- (12) *Statistical Estimation and Inference for the Associations of Multivariate Recurrent Event Processes*, Peilin Chen, Year 2019. UNC Charlotte Electronic Theses and Dissertations. Technical Report Series Preprint no. 2019-10.
- (13) *The Semiparametric Mark-Specific Proportional Hazards Model for Multivariate Marks via A Single-Index*, Yuehan Shao, 2020. UNC Charlotte Electronic Theses and Dissertations. Technical Report Series Preprint no. 2020-04
- (14) *Semiparametric Additive Hazards Models with Missing Covariates*, Pramesh Subedi, 2021. UNC Charlotte Electronic Theses and Dissertations. Technical Report Series Preprint no. 2021-01.
- (15) *Statistical Inference of Semiparametric Cox-Aalen Transformation Models with Failure Time Data*, Xi Ning, 2023, joint supervised with Dr. Yinghao Pan. UNC Charlotte Electronic Theses and Dissertations. Technical Report Series Preprint no. 2023-02.
- (16) *Estimation and Inference for Dynamic Intensity Models for Recurrent Event Data with Applications to the Malaria Trial*, Jing Xu, 2024. UNC Charlotte Electronic Theses and Dissertations. Technical Report Series Preprint no. 2024-06.
- (17) *Stratified Semiparametric Regression Analysis of Partly Interval Censored Failure Time Data with Missing and Mis-Measured Longitudinal Covariates*, Gang Cheng, 2025, joint supervised with Dr. Qingning Zhou. UNC Charlotte Electronic Theses and Dissertations. Technical Report Series Preprint no. 2025-xx.

• M.S. Projects Supervised

- (1) *Model Misspecifications in Semiparametric Time-Varying Coefficients Regression Model for Longitudinal Data*, Ms. Liwen Jia, Year 2005;
- (2) *Statistical Inference of Relative Risks in Competing Risks Models Adjusting for Covariate Effects*, Mr. Seunggeun Hyun, Year 2005;
- (3) *North Carolina Medicaid Survey Analysis*, Ms. Huiqun Ma, Spring 2006;
- (4) *Poisson Regression in Efficient Validation of Automated Records for Vaccine-Outcome Associations*, Ms. Yuriko Nagano, Fall 2007.

- (5) *Statistical Analysis for Washington Reemployment Bonus Experiment*, Ms. Monica Kweman, Spring 2009.
- (6) *Statistical Modeling for Relative and Excess Mortality with Applications to COVID-19 Pandemic*, Jeffrey Barlow, Spring 2021.
- **Senior Projects Supervised** Supervised two senior projects (MATH 3689) with Titles “*Learning Statistical Analyses Using S-Plus-Bootstrap Maximum Likelihood Estimate*” and “*Learning Statistical Analyses Using S-Plus-Analyzing Geese Data Using Regression Method*”.
- **Graduate Committees Served.**
 - Ph.D Dissertation Committee
 - * Chair of Ph.D Dissertation Defense Committee (Proposal Defense/Oral Exam at a earlier time) for Gang Cheng (2025), Jing Xu (2024), Xi Ning (2023), Pramesh Subedi (2021), Yuehan Shao (2020), Peilin Chen (2019), Fei Heng (2019), Liqui Deng (2019), Fang Fang (2018), Unkyung Lee (2016), Li Qi (2015), Qiong Shou (2012), Mei Li (2011), Lipka Ghosh (2011, Co-Chair), Jimin Lee (2008), Seunggeun Hyun (2007), Liwen Jia (2005, Ph.D Oral Exam only), Yiwei Cai (2002, Ph.D Oral Exam only), Sufang Cui (2000).
 - * Member of Ph.D Dissertation Defense Committee (Proposal Defense/Oral Exam at a earlier time) for Xu Cao (2024), Hannah L Stokes (2023, Mechanical Engineering and Biomedical Engineering), Masoumeh Kiasari (2021), Cong Zhao (2017), Xintian Yu (2016), Xing Zhang (2013), Yi Liu (2013), Jun Zhou (2009), Hongwei Huang (2008), Yunfei Wang (2006), Helong Li (2006), Shelton Jin (2005), Xiaoping Xu (2005), Xian Wang (2003), Matthew Peeler (2001, Oral Exam), Jian Chen (2001), Rufeng Liang (1999).
 - Ph.D Dissertation Committee Faculty Representative
 - * Faculty Representative for the Ph.D (Proposal) Dissertation Defense Committee (Proposal Defense at a earlier time) for Luke Demars (2021, Optical Science and Engineering), Li Yu (2012, Department of Computer Science), Xianlin Hu (2012, Department of Computer Science), Li Yu (2010, Information Technology), Devendra Karodkar (2006, Department of Mechanical Engineering).
 - Ph.D Preliminary Examination Committee Served as Author, Reader and/or Grader
 - * Probability and Inference (STAT5126/5127) (2024, 2023, 2022, 2021, 2020, 2019, 2018, 2017, 2016, 2015, 2014, 2013, 2011, 2010, 2006, 2003, 2001, 1999, 1998).
 - * Advance Probability (MATH 8120) (2014, 2013, 2012, 2011).
 - Master Exams Committee
 - * Chair of Master Project and MS comprehensive exam committee for Jeffrey Barlow (2021), Monica Kweman (2009), Yuriko Nagano (2007), Huiqun Ma (2006), Jimin Lee (2005), Seunggeun Hyun (2005), Liwen Jia (2005).
 - * Member of Master Project and MS comprehensive exam committee for James Young (2024), Curtis Ianni (2024), Abel Villanueva (2024), Shahryar Karimi (2024), Isabella Burton (2022), Jinjing Zhang (2021), Gordon Black (2016), Yijing Zhou (2015), Shilue Zhang (2015), Yuemong Li (2012), Minhao Cai (2010), Shan Xie (2009), Yunfei Wang (2008), Jun Zhou (2008), Eric Fales (2007), Sherri Emery (2006), Mary Paulraj (2006), Zachary Thompson (2002), Xiaoping Xu (2002), Henong Li (2002), Dave Flynn (2000).

Course Proposal Development

- Theory of Probability and Statistics II (STAT 7117/8117),
- Survival Analysis (STAT 7137/8137).

Services within UNCC

- Representing the College of Liberal Arts and Sciences to serve on the First Citizens Bank Scholars Medal selection committee. (Three years term September, 2020.9 – September, 2023).
- Served as a member of the Health Commission appointed by UNC Charlotte Provost and Vice Chancellor in 1999 to advocate the role of biostatistics medical and health care researches.
- Served as a member of the Institute for Social Capitals Scholars Advisory Council (SAC), the UNC Charlotte Urban Institute for Social Capital, Inc., 2014–2016.
- Served as a faculty mentor for three junior faculty.
- Performed peer classroom observation and teaching evaluation on yearly basis.
- Served on Department Review Committee (many times, 2020-21).
- Served on Department Chair Search Committee (2018-20).
- Statistics seminar organizer for – many years.
- And more ...

Editorial Service

- Served as an Associate Editor for *International Journal of Biostatistics* 2013-2024.
- Served as an Associate Editor for *Statistics in Biosciences* 1/2021-12/2024.
- Served as an Associate Editor for *Electronic Journal of Statistics* 1/2022 -12/2024.
- Served as an Associate Editor for *Journal of the American Statistical Association* 1/2020-1/2023.
- Served as a book reviewer for the following books:
 - Post-publication book review in *Journal of the American Statistical Association*, 2002 for the book by Martin Crowder (2001), *Classical Competing Risks*, Chapman & Hall.
 - Pre-publication book review for the book by Andersen, P.K., Borgan, Ø., Gill, R.D., and Keiding, N. (1993), *Statistical Models Based on Counting Processes*, Springer-Verlag, New York.
 - Pre-publication book review for the book by Torben Martinussen and Thomas Scheike (2006), *Dynamic Regression Models for Survival Data*, Springer, New York.

- Served as a reviewer for most statistical journals and often multiple reviews each year for many of these journals including
 - *Journal of the Royal Statistical Society: Series B*, *Journal of the American Statistical Association*, *The Annals of Statistics*, *Biometrika*, *Biometrics*, *Electronic Journal of Statistics*, *Canadian Journal of Statistics*, *Annals of the Institute of Statistical Mathematics*, *Biometrical Journal*, *Biostatistics*, *Lifetime Data Analysis*, *Statistics Sinica*, *Scandinavian Journal of Statistics*, *The Journal of Statistical Computation and Simulation*, *Computation Statistics*, *IEEE Transactions on Reliability*, *International Journal of Biostatistics*, *Journal of Korean Statistical Association*, *Journal of Multivariate Analysis*, *Journal of Nonparametric Statistics*, *Journal of Systems Science and Complexity*, *Probability and Statistics Letters*, *Science China Mathematics*.

Professional Services

- Served on the Statistics Panel of the NSF Division of Mathematical Sciences for statistics grant applications (2013, 2016 and 2021) and reviewed statistical grant proposals for NSF.
- Served as a nominator for an ASA fellow and supported applications of several membership applications for International Statistical Institute (ISI).
- Served as an external statistical expert reviewer for **twenty** tenure and promotion cases.
 - (1) University of South Florida;
 - (2) Georgia State University (multiple reviews);
 - (3) University of Georgia;
 - (4) Texas State University;
 - (5) University of South Carolina Upstate;
 - (6) Medical College of Wisconsin;
 - (7) University of California Berkeley;
 - (8) University of Regina, Canada;
 - (9) Columbia University;
 - (10) St. Jude Children's Research Hospital, Memphis, TN;
 - (11) The University of Texas Health Science Center at Houston (UTHealth) School of Public Health (multiple reviews);
 - (12) The University of Texas Health Science Center at Houston, Medical School;
 - (13) Department of Biostatistics, The University of Texas MD Anderson Cancer Center, Houston;
 - (14) Department of Mathematics at Western Kentucky University;
 - (15) University of Regina, Canada (2);
 - (16) Department of Biostatistics, Mailman School of Public Health, Columbia University;
 - (17) Vaccine & Infectious Disease Division, Fred Hutchinson Cancer Center.

- Served as the vice-chair of the local arrangement committee for the ENAR 2001 meeting in Charlotte. Organized and chaired some national and international statistical conferences including
 - (1) Invited session organizer and chair for ICSA (International Chinese Statistics Association), Raleigh, NC, June 3–6, 2007;
 - (2) Invited session organizer and chair for International Conference on Statistical Analysis of Complex Data, Kunming, China, June 30–July 3, 2010;
 - (3) Invited Session organizer and chair for the 2010 ICSA International Conference in Guangzhou, China, Dec. 19–22, 2010;
 - (4) Session chair for the 3rd IMS-China International Conference on Statistics and Probability (IMS-CICSP), XiAn, China, July 8–11, 2011;
 - (5) One of the meeting organizers for International Conference on Analytical and Computational Methods for Complex Systems (ICACMCS 2012), Wuhan, Hubei, China, June 15–17, 2012;
 - (6) Invited session organizer on “Recent Advances In Failure Time Data Analysis” for ISI World Statistics Congress, August 25 - 30, 2013, Hong Kong;
 - (7) Organizer of topic contributed session on “Novel Statistical Methods for Incomplete Longitudinal Data Analysis” for the 29th European Meeting of Statisticians, Budapest, Hungary, July 20 - 25, 2013;
 - (8) Invited session organizer on “Recent advances on longitudinal data analysis” for the IMS-China conference in Chengdu, China, from June 30 - July 4, 2013;
 - (9) Invited session organizer for 2015 ICSA China Statistics Conference to be held in Fudan University, Shanghai, China, July 6–7, 2015. The title of the invited session is Recent Advances In Statistical Design, Risk Analysis And Prediction;
 - (10) Invited session organizer for JSM 2015 to be held in Seattle, August 8–13, 2015. The title of the invited session is “Recent Advances in Statistical Methods for Complex Longitudinal Data”;
 - (11) Member of the Scientific Programme Committee and session organizer for CMStatistics 2015, University of London, London, UK, from Dec. 13 –14, 2015.
 - (12) Member of the Scientific Programme Committee, session organizer and chair for CM-Statistics 2016, the Higher Technical School of Engineering, University of Seville, Spain, 9-11 December 2016.
 - (13) Invited session organizer on “Semiparametric Statistical Methods for Complex Failure Time Data”, for 2017 Lifetime Data Science Conference, entitled “Data science, precision medicine and risk analysis with lifetime data”, University of Connecticut in May 25-27, 2017.
 - (14) Invited session organizer “Semiparametric Modeling of Incomplete Event Data ”, for 2017 ICSA International Conference on Data Science with the focus on Lifetime Data, Jilin University, Jilin City, July 2-5, 2017.
 - (15) Session organizer of the session on “Recent Development in Statistical Learning and Modeling of Complex Data”, for CMStatistics 2017, the Senate House, University of London, UK, from December 16 to December 18, 2017.

- (16) Invited session organizer of the session on “Recent Development in Semiparametric Statistical Methods for Model Estimation and Variable Selection”, for The 2018 ICSA China Conference, Qingdao, China, July 2-5, 2018.
 - (17) Served as a Judge for the Student Paper Awards committee for the Lifetime Data Science Conference in Pittsburgh in May, 2019.
 - (18) Member of the scientific programm committee and session organizer for for the 2020 ICSA China Conference held at Zhongnan University of Economics and Law, Wuhan, China, June 26-29, 2020 (cancelled due to the COVID-19 pandemic).
 - (19) Invited session organizer of the session on “New Challenges in Lifetime Data Analyses”, for Applied Statistics Symposium-Houston, Virtual Conference, December 13-16, 2020.
 - (20) Member of the scientific programme committee and session organizer for the 12th ICSA International Conference to be held at the Chinese University of Hong Kong during July 7-9, 2023. Organizer of two invited sessions.
 - (21) Invited session organizer of the session on “Recent Development of Statistical Methods for Complex Survival Data in Medical Studies”, the Fifth International Workshop on Statistical Analyses of Multi-Outcome Data, Salzburg, Austria, on July 9-10, 2024.
 - (22) Invited session organizer of the session on “Statistical Methods for Survival Data with Complex Censoring and Missing or Mismeasured Covariates,” for the 2025 ICSA China Conference, Zuhai, China, June 28-30, 2025.
- Offered several week-long courses on survival and event history data analysis to the graduate students in China to enhance statistical education and promote statistical applications including
 - (a) One-week course on Survival Analysis at Shanghai University of Finance and Economics in June 2–6, 2008;
 - (b) Two-days course on Introduction to Survival Analysis in Department of Mathematics, Zhejiang University, Hongzhou, China, June 28–29, 2010;
 - (c) Three-weeks course on Survival and Event History Data Analysis at Shanghai University of Finance and Economics in May, 2011;
 - (d) Three-weeks course on Survival and Event History Data Analysis at Shanghai University of Finance and Economics in May, 2012;
 - (e) Three-weeks course on Survival and Event History Data Analysis at Shanghai University of Finance and Economics in May - June, 2013.
 - (f) One-week course on Survival and Event History Data Analysis at Institute of Statistics and Big Data, Renmin University of China, June 5 - June 9, 2017.
 - Delivered a large number of invited colloquia presentations in universities and at national and international statistical conferences. The list is given below.

Presentations Given in Meetings and Colloquium Talks

1. Invited speaker on “Generalized nonparametric temporal modeling of recurrent events, with application to a malaria vaccine trial,” at the 2024 Joint Statistical Meetings Conference, Portland, Oregon, August 3-8, 2024.

2. Invited speaker on “Regression analysis of semiparametric Cox-Aalen transformation models with partly interval-censored data,” at the Fifth International Workshop on Statistical Analyses of Multi-Outcome Data, Salzburg, Austria, on July 9-10, 2024.
3. Invited speaker on “A semiparametric Cox-Aalen transformation model with censored data,” at the ICSA China Conference, Wuhan, China June 28-30, 2024.
4. Invited speaker on “Semiparametric additive time-varying coefficients model for longitudinal data with censored time origin,” at the 6th International Conference on Econometrics and Statistics (EcoSta2023), Waseda University, Tokyo, Japan, August 1-3, 2023.
5. Invited speaker on “A Semiparametric Cox-Aalen Transformation Model with Censored Data,” at CityU Day of Biostatistics (Hybrid, On site and online), City University of Hong Kong, Hong Kong, July 10, 2023.
6. Invited speaker on “A Semiparametric Cox-Aalen Transformation Model with Censored Data,” at the 12th ICSA International Conference held in the Chinese University of Hong Kong, Hong Kong, July 7-9, 2023.
7. Invited speaker on “Analysis of the Cox Model with Longitudinal Covariates with Measurement Errors and Partly Interval Censored Failure Times, with Application to an AIDS Clinical Trial,” at the ICSA China Conference, Chengdu, China June 30-July 3, 2023.
8. Invited speaker on “A Semiparametric Cox-Aalen Transformation Model with Censored Data,” at the 2022 IMS International Conference on Statistics and Data Science (ICSIDS), Florence, Italy, December 13-16, 2022.
9. Participant of the Online BIRS-CMO Workshop, “Statistical Challenges in the Identification, Validation, and Use of Surrogate Markers,” Oaxaca, Mexico, August 21-26, 2022.
10. Invited speaker on “Analysis of the Cox Model with Longitudinal Covariates with Measurement Errors and Partly Interval Censored Failure Times, with Application to an AIDS Clinical Trial,” at the ICSA 2022 Applied Statistics Symposium, University of Florida, Gainesville, Florida, on June 19-22, 2022.
11. Invited colloquium speaker on “Analysis of Generalized Semiparametric Mixed Varying-Coefficients Models for Longitudinal Data,” at J. Mark Robinson College of Business, Georgia State University (virtual, March 25, 2022).
12. Invited colloquium speaker on “A Hybrid Method for the Stratified Mark-Specific Proportional Hazards Models with Missing Data, with Applications to Dengue Vaccine Efficacy Trials,” at Department of Biostatistics from Columbia University (virtual, November 4, 2021).
13. Invited speaker on “A Hybrid Method for the Stratified Mark-Specific Proportional Hazards Models with Missing Data, with Applications to Dengue Vaccine Efficacy Trials”, The SIBS session of the 2021 ICSA Applied Symposium (virtual, Sept 12-15, 2021).
14. Invited speaker on “Analysis of Generalized Semiparametric Mixed Varying-Coefficients Models for Longitudinal Data,” ICSA 2020 Applied Statistics Symposium, Virtual Conference, Houston, December 13-16, 2020.

15. Invited topic-contributed speaker on “Improving Efficiency of Analysis of Generalized Semiparametric Regression Models for Cumulative Incidence Functions with Missing Covariates”, The Joint Statistics Meetings, Virtual Conference, Aug. 1–6, 2020.
16. Invited speaker for Biostatistics Visiting Guest Lecturer (VGL) series on “Analysis of Generalized Semiparametric Mixed Effects Varying-Coefficient Model for Longitudinal Data,” Dept. of Statistics and Actuarial Science, MD Anderson Cancer Center, Houston, December 18, 2019.
17. Invited speaker on “Analysis of the Time-Varying Cox Model for Cause-Specific Hazard Functions with Missing Causes”, the 2019 ICSA China Conference, Nankai University, China, July 1-4, 2019.
18. Invited speaker in topic-contributed paper session on “A Hybrid Method for the Stratified Mark-Specific Proportional Hazards Models with Missing Data, with Applications to Dengue Vaccine Efficacy Trials”, 2018 Joint Statistical Meetings, Vancouver, Canada, July 28– August 2, 2018.
19. Invited speaker on “A Hybrid Method for the Stratified Mark-Specific Proportional Hazards Models with Missing Data, with Applications to Dengue Vaccine Efficacy Trials”, 2018 ICSA China Conference, July 2-5, 2018 at Shangri-La Hotel, 9 Xiang Gang Zhou Lu, Qingdao, Shangdong, China.
20. Invited speaker on “Estimation of Generalized Semiparametric Regression Models for the Cumulative Incidence Functions with Missing Covariates,” ENAR meeting, Atlanta, March 25-28, 2018.
21. Colloquium speaker on “Analysis of Generalized Semiparametric Mixed Effects Varying-Coefficient Model for Longitudinal Data,” Dept. of Statistics and Actuarial Science, University of Waterloo, Canada, March 8, 2018.
22. Invited speaker on “A hybrid method for the stratified mark-specific proportional hazards models with missing data with applications”, The 10th International Conference of the ERCIM WG on Computational and Methodological Statistics (CMStatistics 2017), the Senate House, University of London, UK, December 16 - 18, 2017.
23. Invited topic-contributed speaker on “Analysis of Stratified Mark-Specific Proportional Hazards Models with Two-Phase Sampling of Covariates with Application to HIV Vaccine Efficacy Trials”, at The 39th Conference on Stochastic Processes and their Applications (SPA2017), Moscow, July 24-28, 2017.
24. Colloquium speaker on “Event Data Analysis and Its Applications.” School of Mathematics, Yangzhou University, China, June 22, 2017.
25. Invited speaker on “Analysis of Generalized Semiparametric Mixed Effects Varying-Coefficient Model for Longitudinal Data.” Third International Conference on Engineering and Computational Mathematics (ECM2017), The Hong Kong Polytechnic University, 31 May - 2 June 2017.
26. Invited speaker on “Analysis of Two-Phase Sampling Data with Semiparametric Additive Hazards Models.” The 2017 Conference on Lifetime Data Science, Storrs, Connecticut, May 25–27, 2017.

27. Colloquium speaker on “Generalized Semiparametric Varying-Coefficient Model for Longitudinal Data with Applications to Adaptive Treatment Randomizations.” Department of Statistics, University of Missouri-Science & Technology, Rolla, Missouri, April 14, 2017.
28. Colloquium speaker on “Generalized Semiparametric Varying-Coefficient Model for Longitudinal Data with Applications to Adaptive Treatment Randomizations.” Department of Mathematics and Statistics, University of Florida, Gainesville, March 16, 2017.
29. Invited speaker on “Analysis of Stratified Mark-Specific Proportional Hazards Models with Two-Phase Sampling of Covariates with Application to HIV Vaccine Efficacy Trials”, at The 10th ICSA international conference, Xuhui campus of Shanghai Jiao Tong University, China, December 19-22, 2016.
30. Invited speaker on “Analysis of generalized semiparametric mixed varying-coefficient effects model for longitudinal data” at The 9th International Conference of the ERCIM WG on Computational and Methodological Statistics (CMStatistics 2016), the Higher Technical School of Engineering, University of Seville, Spain, December 9-11, 2016.
31. Colloquium speaker on “Generalized Semiparametric Varying-Coefficient Model for Longitudinal Data with Applications to Adaptive Treatment Randomizations” at Fred Hutchinson Cancer Research Center, Seattle, Sept. 28, 2016.
32. Invited speaker, The 6th International Biostatistics Workshop of Jilin University, Jilin University, Changchun, Jilin, China, July 7-9, 2016.
33. Invited speaker on “Estimation of Stratified Mark-Specific Proportional Hazards Models with Two-Phase Sampling of Covariates with Application to HIV Vaccine Efficacy Trials”, The 4th IBS-China International Biostatistics Conference, Shanghai, July 2-3, 2016.
34. Invited speaker, The 4th Institute of Mathematical Statistics Asia Pacific Rim Meeting, Hong Kong, June 27-30, 2016. Title of the talk on “Estimation of Stratified Mark-Specific Proportional Hazards Models with Two-Phase Sampling of Covariates with Application to HIV Vaccine Efficacy Trials”.
35. Invited speaker on “Generalized Semiparametric Models for Longitudinal Data with Applications to Treatment Switching”, CMStatistics 2015, University of London, London, UK, from December 13 –14, 2015.
36. Colloquium speaker on “Semiparametric Additive Regression Model for Longitudinal Data with Censored Time Origin,” in Dept. of Biostatistics, University of South Carolina, Columbia, November 17, 2015.
37. Invited seminar speaker, Fred Hutchinson Cancer Research Center, Seattle, Aug. 17, 2015, on “Semiparametric Additive Regression Model for Longitudinal Data with Censored Time Origin.”
38. Invited speaker on “Semiparametric Additive Regression Model for Longitudinal Data with Censored Time Origin”, The Joint Statistics Meetings, Seattle, Aug. 8–13, 2015.
39. Invited speaker on “Semiparametric Additive Regression Model for Longitudinal Data with Censored Time Origin”, The 2015 ICSA-Canada Statistics Symposium, Calgary, Canada, Aug. 4–6, 2015.

40. Invited speaker on “Semiparametric Additive Hazards Regression Models For Case-Cohort/Two-Phase Sampling Designs”, The 2015 ICSA Statistics Conference, Shanghai, July 6-7, 2015.
41. Invited speaker, School of Economics, Jinan University, Guangzhou, June 9, 2015, on “Efficient Estimation Of Stratified Mark-Specific Proportional Hazards Models With Missing Marks.”
42. Special invited speaker on “Analysis of stratified mark-specific proportional hazards models with missing marks, with application to HIV vaccine efficacy trials”, 7th International Conference of the ERCIM WG on Computational and Methodological Statistics (ERCIM 2014), 6–8 December 2014, University of Pisa, Italy.
43. Colloquium speaker on “Semiparametric additive hazards regression models for case-cohort/two-phase sampling designs,” in Dept. of Biostatistics, University of Copenhagen, Copenhagen, Denmark on December 3, 2014.
44. Colloquium speaker on “Semiparametric additive hazards regression models for case-cohort/two-phase sampling designs,” in Dept. of Statistics, University of Illinois, Urbana-Champaign, April 3, 2014.
45. Invited speaker on “Semiparametric additive hazards regression models for case-cohort/two-phase sampling designs”, The 3rd Institute of Mathematical Statistics Asia Pacific Rim Meeting, Taipei, June 29-July 3, 2014.
46. Invited speaker on “Inferences on relative failure rates in stratified mark-specific proportional hazards models with missing marks, with application to HIV vaccine efficacy trials,” The Third Joint Biostatistics Symposium, Chengdu, China, June 27-28, 2014.
47. Invited speaker, School of Economics, Jinan University, Guangzhou, June 24, 2014, on “Semiparametric additive hazards regression models for case-cohort/two-phase sampling designs.”
48. Invited speaker, School of Mathematical Science, Yangzhou University, Yangzhou, China, June 10, 2014, on “Elements of Biostatistics”.
49. Invited speaker on “Testing mark-specific vaccine efficacy with missing marks”, The ISI World Statistics Congress, Hong Kong, August 25 - 30, 2013.
50. Invited speaker at a topic contributed session on “Novel Statistical Methods for Incomplete Longitudinal Data Analysis” at the 29th European Meeting of Statisticians, Budapest, Hungary, July 20 - 25, 2013.
51. Invited speaker on “Recent advances on longitudinal data analysis” at the IMS-China conference in Chengdu, China, from June 30 - July 4, 2013.
52. Invited speaker at Jinan University in Guangzhou, China, June 21, 2013, on “Quantile Regression for Competing Risks Data with Missing Cause of Failure”.
53. Invited speaker on “Profile Local Linear Estimation of Generalized Semiparametric Regression Model for Longitudinal Data”, at the 2nd Workshop on Biostatistics and Bioinformatics in Georgia State University, Atlanta, Georgia, May 10–12, 2013.

54. Invited speaker on “Quantile Regression for Competing Risks Data with Missing Cause of Failure”, at International Conference on Advances in Interdisciplinary Statistics and Combinatorics, Greensboro, North Carolina, October 5-7, 2012.
55. Invited speaker on “Quantile Regression for Competing Risks Data with Missing Cause of Failure” at a topic contributed session at Joint Statistical Meetings (JSM), San Diego, July 28 – August 2, 2012.
56. Invited speaker at (ICACMCS 2012) International Conference on Analytical and Computational Methods for Complex Systems, Wuhan, China, June 15 – 17, 2012, Hosted by College of Science, Wuhan University of Technology.
57. Invited speaker speaker on “Quantile Regression for Competing Risks Data with Missing Cause of Failure” at The Second International Biostatistics Workshop of Jilin University, Changchun, China, June 17 – 20, 2012.
58. Invited speaker on “Estimation of stratified mark-specific proportional hazards models with missing marks”, at IMS-China International Conference on Statistics and Probability, Xi’An, China, July 8–11, 2011.
59. Invited speaker at School of Statistics and Management, Shanghai University of Finance and Economics, June 13, 2011, on “Quantile Regression for Competing Risks Data with Missing Cause of Failure”, and on “A semiparametric random effects model for multivariate competing risks data”.
60. Invited speaker at Biostatistics Seminar series at University of Virginia, March 9, 2011, on “Quantile Regression for Competing Risks Data with Missing Cause of Failure”.
61. Invited speaker on “Quantile Regression for Competing Risks Data with Missing Cause of Failure”, at The Eighth ICSA International Conference: Frontiers of Interdisciplinary and Methodological Statistical Research, Guangzhou University, Guangzhou, China, Dec. 19–22, 2010.
62. Invited speaker on “Testing independent censoring for longitudinal data”, at International Conference on Applied Statistics and Financial Mathematics, The Hong Kong Polytechnic University, Hong Kong, Dec. 16–19, 2010.
63. Invited speaker on “A semiparametric random effects model for multivariate competing risks data”, at Biostatistics Seminar series at Yale University, October 19, 2010.
64. Invited speaker on “Testing independent censoring for longitudinal data”, at First Joint Biostatistics Symposium, Renmin University, Beijing, China, July 17–18, 2010.
65. Invited speaker on “A semiparametric random effects model for multivariate competing risks data”, at International Conference on Statistical Analysis of Complex Data, Yunnan University, Kunming, China, June 30 – July 3, 2010.
66. Invited speaker at Fields Workshop on Modelling Indirectly or Imprecisely Observed Data, Ontario, Canada, Dec. 10–12, 2009, on “Efficient estimation of stratified mark-specific proportional hazards models with missing marks”.

67. Invited speaker at 2009 International Conference on Financial Statistics and Financial Econometrics (ICFSFE) , July 8–10, 2009, Chengdu, China, on “Efficient estimation of stratified mark-specific proportional hazards models with missing marks”.
68. Invited speaker at International Conference On Robust Statistics (ICORS 2009) in Parma, Italy, June 9–14, 2009, on “Empirical likelihood inference for the Cox model with time-dependent coefficients via local partial likelihood”.
69. Invited speaker at Copenhagen University, Department of Biostatistics, June 8, 2009, on “Empirical likelihood inference for the Cox model with time-dependent coefficients via local partial likelihood”.
70. Invited speaker at Conference at New Jersey Institute of Technology (NJIT), June 1–2, 2009, on “A semiparametric random effects model for multivariate competing risks data”.
71. Invited speaker at Department of Statistics, Florida State University, Tallahassee, April 17–18, 2009. at the 50th anniversary celebration, on “A semiparametric random effects model for multivariate competing risks data”.
72. Invited speaker at the workshop on “Nonparametric Statistics, Refined, Redefined, and Renewed”, at University of Texas at Arlington, Arlington, Texas, April 15–17, 2009, on “Empirical likelihood inference for the Cox model with time-dependent coefficients via local partial likelihood”.
73. Invited colloquium speaker on “Estimation of stratified mark-specific proportional hazards models with missing marks,” at University of South Carolina at Columbia, March 25, 2009.
74. Invited colloquium speaker on “Estimation of stratified mark-specific proportional hazards models with missing marks,” at University of North Carolina at Chapel Hill, March 4, 2009.
75. Invited colloquium speaker on “Two-stage efficient estimation of stratified mark-specific proportional hazards models with missing marks”, at Chinese Academy of Mathematics and Systems Science, Jan. 5–13, 2009.
76. Invited speaker on “Robust Estimation of Semiparametric Regression Model with Longitudinal Data”, Winemiller 2008 Conference on Survival Analysis and Its Applications, October 15–18, 2008, Columbia, Missouri.
77. Invited colloquium speaker on “Robust Estimation of Semiparametric Regression Model with Longitudinal Data”, at Wuhan University of Technology, June 23, 2008.
78. Invited speaker on “Robust Estimation of Semiparametric Regression Model with Longitudinal Data”, IMS-China International June 11–13, 2008, Hongzhou, China.
79. Contributed talk on “Empirical likelihood inference for the Cox model with time-dependent coefficients via local partial likelihood”, JSM2007, Salt Lake City, Utah, July 29 – August 2, 2007.
80. Invited speaker on “Proportional hazards models with continuous marks”, ICSA2007, Raleigh, NC, June 3 – 6, 2007.
81. Invited speaker on “Proportional hazards models with continuous marks”, IMST2007, Shanghai, China, May 20 – 23, 2007.

82. Contributed talk on “Maximum Likelihood Estimation For Tied Survival Data Under Cox Regression Model Via Em-Algorithm”, ENAR2007, Atlanta, March 10 – 14, 2007.
83. Contributed talk on “Mark-specific proportional hazards modelling”, XXIII International Biometric Conference, Montreal, Canada, July 16 – 21, 2006.
84. Invited participant for International Conference on Frontiers in Statistics – Biostatistics and Bioinformatics, Northeast Normal University, Changchun, China, July 7 – 8, 2006.
85. Invited speaker on “Two-sample problem for failure rates depending on a continuous mark: an application to vaccine efficacy”, presented at International Conference on Asymptotic Theory in Probability and Statistics, Zhejiang University, Hangzhou, China, June 19–21, 2006.
86. Invited colloquium speaker at Zhejiang University, Hangzhou, China, June 19–21, 2006.
87. Invited speaker on “Semiparametric Time-Varying Coefficients Regression Model for Longitudinal Data,” presented at JSM in Minneapolis, August 7–11, 2005.
88. Invited colloquium speaker at Department of Biostatistics, Copenhagen University, Denmark. Title of the talk: “Statistical Inferences for Mark-Specific Hazards and Mark-Specific Relative Risks ”, June 6, 2005.
89. Invited colloquium speaker at Department of Biostatistics, Leiden University, The Netherlands. Title of the talk: “Statistical Inferences for Mark-Specific Hazards and Mark-Specific Relative Risks ”, June 30, 2005.
90. Invited colloquium speaker at Department of Biostatistics, Columbia University. Title of the talk: “Statistical Inferences for Mark-Specific Hazards and Mark-Specific Relative Risks ”, Feb. 17, 2005.
91. Invited colloquium speaker at Statistical Center for HIV/AIDS Research and Prevention, Fred Hutchinson Cancer Research Center, Seattle, WA, December 20, 2004, on ”Local linear estimation for time-dependent coefficients in Cox’s regression models”.
92. Invited colloquium speaker at Wuhan University, July 16, 2004, on “Semiparametric Time-Varying Coefficients Regression Model for Longitudinal Data”.
93. Invited colloquium speaker at Wuhan University of Science, July 15, 2004, on “Semiparametric Time-Varying Coefficients Regression Model for Longitudinal Data”.
94. Contributed talk at ENAR March 28–31, 2004, on “Failure time analysis of HIV Vaccine Effects on Viral load and treatment initiation”.
95. Invited colloquium speaker at Georgia State University, March 26, 2004, on “Failure time analysis of HIV Vaccine Effects on Viral load and treatment initiation”.
96. Invited speaker at Bernoulli Society East Asian and Pacific Regional Conference, Dec. 18–20, 2003, Hong Kong. Title of the talk: “Semiparametric Time-Varying Coefficients Regression Model for Longitudinal Data”.
97. Invited speaker at International Conference on Reliability and Survival Analysis, May 22–24, 2003, Columbia, SC.

98. Invited colloquium talk at Department of Biostatistics, Columbia University. Title of the talk: "Semiparametric Time-Varying Coefficients Regression Model for Longitudinal Data", Feb. 13, 2003.
99. Invited seminar speaker at Department of Biostatistics, Harvard University. Title of the talk: "Semiparametric Time-Varying Coefficients Regression Model for Longitudinal Data", Dec. 6, 2002.
100. Invited speaker in International Nonparametric Statistical Conference, Crete, Greece, July 15–19, 2002. Title of the talk: "Tests for Comparing Mark-Specific Hazards and Cumulative Incidence Functions with Applications in AIDS Research."
101. Invited colloquium speaker in Frontier Science Foundation of Technology, Boston, July, 2001. Title of the talk: "AUC-Based Tests for Nonparametric Functions with Longitudinal Data."
102. Invited colloquium speaker in Department of Statistics, The University of Missouri - Columbia, Oct. 16, 2001. Title of the talk: "AUC-Based Tests for Nonparametric Functions with Longitudinal Data."
103. Contributed talk on "Local Linear Estimation for Time-Dependent Coefficients in Cox's Regression Models," presented at JSM in Atlanta, August 6–9, 2001.
104. Invited speaker at the 40th anniversary of the Department of Statistics, Florida State University, April 21–23, 2000.
105. Contributed talk on "Model Checking Based on Biased Samples", International Biometric Conference in Berkeley, CA, July 1–July 7, 2000.
106. Contributed talk in the 26th Conference on Stochastic Processes and their Applications, Beijing, China, June 14 – 18, 1999.
107. Contributed talk at JSM at Dallas, August 9 – 13, 1998.
108. Invited colloquium speaker on "Generalized Nonparametric Test Procedures for Comparing Multiple Cause-Specific Hazard Rates," at The University of Georgia at Athens, October 22, 1998.
109. Invited colloquium speaker at Department of Statistics, Florida State University, September 11, 1997.
110. Invited speaker at International conference on combinatorics, information theory and statistics, Portland, ME, July 18 – 20, 1997.
111. Contributed talk on "Supremum Goodness-of-Fit Tests for Parametric Models Based on Generalized Kaplan-Meier Estimators", presented at the Spring ENAR meeting, Richmond, Virginia, March 17–20, 1996.
112. Contributed talk on "A goodness-of-fit test for the Cox model", presented at the 50th session of the international statistical institute, Beijing, China, August 21 – 29, 1995.
113. Contributed talk on "Some permutation tests for survival data", presented at the Spring ENAR meeting, Birmingham, Alabama, March 26 – 29, 1995.

114. Contributed talk on “A test for independence of a survival time from a covariate”, presented at the Spring ENAR meeting, Cleveland, Ohio, April 10 – 13, 1994.
115. Invited colloquium talk at Department of Statistics, University of Rochester, November, 1993.