Dr. Peter Song's CV

PETER XUEKUN SONG

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August, 2015

ACADEMIC AND RESEARCH APPOINTMENTS

Professor of Biostatistics **January, 2008 - Present**
Department of Biostatistics, School of Public Health, University of Michigan
Visiting Professor of Statistics **January, 2013 – May, 2013**
Department of Statistics and Applied Probability, National University of Singapore
Full/Associate Professor of Statistics **July, 2004 – December, 2007**
Department of Statistics and Actuarial Science, University of Waterloo
Visiting Associate Professor of Biostatistics **July, 2002 – June, 2003**
Department of Biostatistics, University of Michigan
Associate/Assistant Professor of Statistics **July, 1996 – June, 2004**
Department of Mathematics and Statistics, York University, Toronto, Canada

EDUCATION

Doctor of Philosophy **September, 1992 – June, 1996**
Department of Statistics, University of British Columbia, Vancouver, Canada
Dissertation: *Some statistical models for the multivariate analysis of longitudinal data*
Bachelor of Science (Statistics) **September, 1981 – July, 1985**
Department of Mathematics, Jilin University, Changchun, China

AWARDS AND HONORS

John-von-Neumann Award, Technical University of Munich, Germany, 2013
Elected Member of International Statistical Institute, 2011
The Dean's Award of Outstanding Teaching, York University, Canada, 2002

AREAS OF INTERESTS

Statistical Methodology: Composite Likelihood Method, Copula, Generalized Linear Models, Longitudinal Data Analysis, Missing Data, Statistical Computing, Spatial/Spatio-temporal Data Analysis.
Biomedical Empirical Study (Major): Asthma, Bioinformatics, Biomarker, Chronic Disease, Injury, Nephrology, Obesity, Statistical Genetics
Econometrics (Minor): Financial Time Series Analysis, including state space models, discrete-valued ARMA models, diffusion models for functional data.

PUBLICATION

Book

1. **Song, P. X.-K.** (2007). **Correlated Data Analysis: Modeling, Analytics and Applications**. New York: Springer.

Part I: Articles in Refereed Journals (Statistical Methodology)

2. Wang, F., **Song, P.X.K.** and Wang, L. (2015). Merging multiple longitudinal studies with study-specific missing covariates: A joint estimating function approach. *Biometrics* (to appear)

3. Han, P., **Song, P.X.K.** and Wang, L. (2015). Achieving semiparametric efficiency bound in longitudinal data analysis with dropouts. *Journal of Multivariate Analysis* **135**, 59-70.

4. Zhou, Q.M., **Song, P.K.** and Thompson, M.E. (2015). Profiling heteroscedasticity in linear regression models. *Canadian Journal of Statistics* (to appear) [This is an invited paper for Zhou's Pierrer Robillard Award]

5. Ma, S. and **Song, PXK.** (2015). Varying index coefficient models. *Journal of American Statistical Association* **110**, 341-356.

6. Lu, X. and **Song, PXK.** (2015). Efficient sieve estimation of the partly linear additive hazards regression model with current status data. *Scandinavian Journal of Statistics* **42**, 306-328.

7. Bai, Y., Kang, J. and **Song, PXK.** (2014). Efficient pairwise composite likelihood estimation for spatial-clustered data. *Biometrics* **70**, 661-670

8. Han, P., **Song, PXK**. and Wang, L. (2014). Longitudinal data analysis using the conditional empirical likelihood method. *Canadian Journal of Statistics* **42**, 404-422.

9. Li, Y., **Song, PXK**, Leichtman, A.B., Rees, M.A. and Kalbfleisch, J.D. (2013). Decision making in kidney paired donation programs with altruistic donors. *Statistics and Operations Research Transactions (SORT)* **38**, 53-72.

10. Chen,Y., Berrocal, V., Bingham, R. and **Song, PXK.** (2014). Analysis of spatial variations in the effectiveness of graduated driver's licensing (GDL) program in the state of Michigan. *Spatial and Spatio-temporal Epidemiology* **8**, 11-22.

11. Li, Y., **Song, P.X.-K.,** Zhou, Y., Leichtman, A.B., Rees, M.A. and Kalbfleisch, J.D. (2014). Optimal Decisions for Organ Exchanges in a Kidney Paired Donation Program. *Statistics in Biosciences* **6**, 84-104.

12. Chen, Y., Li, Y., Kalbfleisch, J.D., Zhou, Y., Leichtman, A. and **Song, P.X.-K.** (2012). Graph-based optimization algorithm and software on kidney exchanges. *IEEE Transactions on Biomedical Engineering* **59(7),** 1985-1991.

13. Bai, Y., **Song, P.X.-K.** and Raghunathan, T.E. (2012). Joint composite estimating functions in spatio-temporal models. *Journal of the Royal Statistical Society Series B* **74**, 799-824.

14. Wang, F., Wang, L. and **Song, P.X.-K.** (2012). Quadratic inference function approach to merging longitudinal studies: Validation test and joint estimation. *Biometrika* **99**,748-754.

15. Zhang, S., **Song, P.X.-K.**, Shi, D. and Zhou, Q.M. (2012). Information ratio test for model misspecification on parametric structures in stochastic diffusion models. *Computational Statistics and Data Analysis* **56**, 3975-3987.

16. Lu, X. and **Song, P.X.-K.** (2012). On efficient estimation in additive hazard model with current status data. *Computational Statistics and Data Analysis* **56**, 2051-2058.

17. Kang, J., Ye, W., Wang, L., Veiga-Lopez, A., Padmanabhan, V. and **Song, P.X.-K.** (2012). Local mixed-effects fitting for detecting reproductive hormone surge times. *Statistics in Biosciences* **4**, 245-261.

18. Hu, Y. and **Song, P. X.-K.** (2012). Sample size determination for quadratic inference functions in longitudinal design with dichotomous outcomes. *Statistics in Medicine* **31**, 787-800.

19. Zhou, Q.M., **Song, P.X.-K.** and Thompson, M.E (2012). Information ratio test for model misspecification in quasi-likelihood inference. *Journal of the American Statistical Association* **107**, 205-213.

20. Zhu, B., Taylor, J.M.G. and **Song, P.X.-K**. (2011). Semiparametric stochastic modeling of the rate function in longitudinal studies. *Journal of the American Statistical Association* **106**, 1485-1495.

21. **Song, P.-K.**, M. Li and Y. Yuan (2010). Rejoinder to "Joint regression analysis for discrete longitudinal data." *Biometrics* 67, 1171-1175.

22. Chen, Y., Kalbfleisch, J.D., Li, Y., **Song, P.X.-K.** and Zhou, Y. (2011). Computerized platform for optimal organ allocations in kidney exchanges. *BIOCOMP2011 Conference (acceptance rate 21%).*

23. Zhu, B., **Song, P.X.-K**. and Taylor, J.M.G. (2011). Stochastic functional data analysis: A diffusion model-based approach. *Biometrics* **67**, 1295-1304.

24. Qu, A., Yi, G.Y., **Song, P.X.-K.** and P. Wang**.** (2011). Assessing the validity of weighted generalized estimating equations. *Biometrika* **98**, 215-224.

25. Gao, X and **Song, P.X-K.** (2011). Composite Likelihood EM algorithm with applications to multivariate hidden Markov model. *Statistica Sinica* **21**, 165-186.

26. Han, P. and **Song, P.X.-K.** (2011). A note on improving quadratic inference function using linear shrinkage approach. *Statistics and Probability Letters* **81**, 438-445.

27. Gao, X and **Song, P.X.-K.** (2010). Composite likelihood Bayesian information criteria for model selection in high dimensional data. *Journal of the American Statistical Association* **105**, 1531-1540.

28. Lin, H and **Song, P.X.-K.** (2010). Longitudinal semi-parametric transition models with unknown link and variance functions. *Statistics and Its Interface* **3**, 197-209.

29. Lu, X, Nan, B, **Song, P.X.-K.** and Fran Sowers, M. (2010). Longitudinal data analysis with event time as a covariate. *Statistics in Biosciences* **2**, 65-80.

30. **Song, P. X.-K.** (2009). Dispersion models in regression analysis. *Pakistan Journal of Statistics* (Invited to the special issue of silver jubilee celebration) **25**, 529-551.

31. **Song, P.X.-K**., Jiang, Z., Park, E. and Qu, A.. (2009). Quadratic inference functions in marginal models for longitudinal data. *Statistics in Medicine* **28**, 3683-3696.

32. Zhang, P., Qiu, Z., Fu, Y. and **Song, P. X.-K.** (2009). Robust transformation mixed-effects models for longitudinal continuous proportional data. *Canadian Journal of Statistics* **37**, 266-281.

33. **Song, P. X.-K**., Li, M. and Yuan, Y. (2009). Joint regression analysis of correlated data using Gaussian copulas. *Biometrics* **65**, 60-68.

34. Gao, X., Pu, D.Q. and **Song, P. X.-K.** (2009). Transition Dependency: A Gene-Gene Interaction Measure for Times Series Microarray Data. *EURASIP Journal on Bioinformatics and Systems Biology*, Vol 2009, Article ID 535869.

35. Qiu, Z., **Song, P.X.-K**. and Tan, M. (2008). Simplex mixed-effects models for longitudinal proportional data. *Scandinavian Journal of Statistics* **35**, 577- 596.

36. Zhang, P., **Song, P.X.-K.**, Qu, A. and Greene, T. (2008). Efficient estimation for patient-specific rates of disease progression using nonnormal linear mixed models. *Biometrics* **64**, 29-38.

37. Czado, C. and **Song, P.X-K.** (2008). State space mixed models for longitudinal observations with binary and binomial responses. *Statistical Papers* **49**, 691-714.

38. Lin, H., **Song, P.X.-K.** and Zhou, Q. (2007). Varying-coefficient marginal models and applications in longitudinal data analysis. *SANKHYA* **69**, 581-614.

39. Jorgensen, B and **Song, P.X.-K**. (2007). Stationary state space models for longitudinal data. *Canadian Journal of Statistics* **35**, 461-483.

40. **Song, P.X.-K**., P. Zhang and A. Qu (2007). Maximum likelihood inference in robust linear mixed-effects models using multivariate t distributions. *Statistica Sinica* **17**, 929-943.

41. Zhang, P., Wang, X. and **Song, P.X.-K.** (2006). Clustering categorical data based on distance vector. *Journal of the American Statistical Association* **101**, 355-367.

42. Lu, X., Chen, G., Singh, R. and **Song, P. X.-K.** (2006). A class of partially linear single-index survival models. *Canadian Journal of Statistics* **34**, 97-112.

43. **Song, P.X.-K.**, Gao, X., Liu, R. and Le, W. (2006). Nonparametric inference for local extrema with application to oligonucleotide microarray data in yeast genome. *Biometrics* **62**, 545-554.

44. Li, M., Boehnke, M, Abecasis, G.R. and **Song, P.X.-K.** (2006). Quantitative trait linkage analysis using Gaussian copulas. *Genetics* **173**, 2317-2327.

45. Jorgensen, B and **Song, P.X.-K.** (2006). Diagnosis of stationarity in state space models for longitudinal data. *Far East Journal of Theoretical Statistics (Special Volume in Biostatistics)* **19,** 43-59.

46. **Song, P.X.-K**., Fan, Y. and Kalbfleisch, J. D. (2005). Maximization by parts in likelihood inference. *Journal of the American Statistical Association* (with Discussion) **100**, 1145-1158.

47. **Song, P.X.-K**., Fan, Y. and Kalbfleisch J. D. (2005). Rejoinder to the discussions on "Maximization by parts in likelihood inference". *Journal of the American Statistical Association* **100**, 1164-1167.

48. Gao, X. and **Song, P.X.-K.** (2005) Nonparametric tests for differential gene expression and interaction effects in multi-factorial micro-array experiments. *BMC Bioinformatics* **6**:186.

49. Clarke, B. and **Song, P.X.-K.** (2004). Approximating dependence structures of repeated stochastic processes. *SANKHYA* **66**, 536-547.

50. **Song, P.X.-K**., Qiu, Z. and M. Tan (2004). Modeling heterogeneous dispersion in marginal simplex models for longitudinal proportional data. *Biometrical Journal* **46**, 540-553.

51. Qu, A. and **Song, P.X.-K.** (2004). Assessing robustness of generalized estimating equations and quadratic inference functions. *Biometrika* **91**, 447-459.

52. Qu, A. and **Song, P.X.-K.** (2002). Testing ignorable missingness in estimating equation approaches for longitudinal data. *Biometrika* **89**, 841-850.

53. Qiu. Z, **Song, P.X.-K.** and Tan, M. (2002). Bayesian hierarchical analysis of multi-level repeated ordinal data using WinBUGS. *Journal of Biopharmaceutical Statistics* **12**, 121-135.

54. Sun, J. and **Song, P.X.-K.** (2001). Statistical analysis of repeated measurements with informative censoring times. *Statistics in Medicine* **20**, 63-73.

55. **Song, P.X.-K.** (2000). Multivariate dispersion models generated from Gaussian copula. *Scandinavian Journal of Statistics* **27**, 305-320.

56. **Song, P.X.-K.** and Tan, M. (2000). Marginal models for longitudinal continuous proportional data. *Biometrics* **56**, 496-502.

57. **Song, P.X.-K.** (2000). Monte Carlo Kalman filter and smoothing for multivariate discrete state space models. *The Canadian Journal of Statistics* **28**, 641-652.

58. **Song, P.X-K.** and Jiang, W. (2000). Assessing conditional independence for log-linear Poisson models with random effects. *Communication in Statistics* **29**, 1233-1245.

59. Jorgensen, B., Lundbye-Christensen, S., **Song, P.X.-K.** and Sun, L. (1999). A state space model for multivariate longitudinal data. *Biometrika* **86**, 169-181.

60. **Song, P.X.-K.** (1997). Generating dependent random numbers with given correlations and margins from exponential dispersion models. *Journal of Statistical Computation and Simulation* **58** 317-335.

61. Jorgensen, B., Lundbye-Christensen, S., **Song, P.X.-K.** and Sun, L. (1996). State space models for multivariate longitudinal data of mixed types. *The Canadian Journal of Statistics* **24**, 385-402.

62. Jorgensen, B., Lundbye-Christensen, S., **Song, P.X.-K.** and Sun, L. (1996). A longitudinal study of emergency room visits and air pollution for Prince George, British Columbia. *Statistics in Medicine* **15**, 823-836.

63. **Song, X.-K.** (1993). The asymptotically optimal rate of an empirical Bayesian distribution function. *J. Sys. Sci. & Math. Sci.* 242-244.

64. **Song, X-K.** (1993). A proof of the recursion relation in the theory of orthogonal regression. *Math. Practice Theory* **2**, 70-77.

65. **Song, X.-K.** (1992). The linear empirical Bayes approach to multiple linear regression model. *Acta Math. Appl. Sinica* **5**, 443-450.

66. **Song, X-K.** (1991). Strong consistency for nonparametric cumulative survival hazard estimation for randomly censored data. *Journal of Southwest Jiaotong University*, 38-43.

67. **Song, X.-K.** (1989). A sufficient and necessary condition for asymptotically optimal empirical Bayesian estimation. *Journal of Southwest Jiaotong University*, 88-91.

68. **Song, X.-K.** (1988). On multidimensional linear empirical Bayes estimation. *Journal of Mathematical Statistics and Applied Probability* **3**, 459-466.

Part II: Articles in Refereed Journals (Biomedical Applications)

69. Bray, M., Wang, W., **Song, P.X.K.,** Leichtman, A. B., Rees, M. A., Ashby, V. B., Eikstadt, R., Goulding, A. and Kalbfleisch, J. D. (2015). Planning for uncertainty and fallbacks can increase the number of transplants in a kidney paired donation program. *American Journal of Transplantation* (to appear).

70. Sampson, M., Robertson, C., Martini, S., Mariani, L., Lemley, K., Gillies, C., Otto, E., Kopp, J.B., Randolph, A., Vega-Warner, V., Eichinger, F., Nair, V., Gipson, D.S., Cattran, D., Johnstone, D., O'Toole, J., Bagnasco, S., **Song, P.X.K.**, Barisoni, L., Troost, J., Kretzler1, M., J. Sedor, J. and the Nephrotic Syndrome Study Network (2015). Integrative genomics identifies novel associations with APOL1 risk genotype in African American NEPTUNE subjects. *Journal of the American Society of Nephrology* (to appear).

71. Selewski, D.T., Troost, J.P., Massengill, S.F., Gbadegesin, R.A., Greenbaum, L.A., Shatat, I.R., Cai, Y., Kapur, G., Hebert, D., Somers, M.J., Trachtman, H., Pais, P., Seifert, M.E., Goebel, J., Sethna, C., Mahan, J.D., Gross, H.E. Herreshoff, E. Liu, Y., **Song, P.X.K.,** Reeve, B.B., DeWalt, D.A., and Gipson, D.S. (2015). The Impact of Disease Duration on Quality of Life in Children with Nephrotic Syndrome: a Midwest Pediatric Nephrology Consortium study Pediatric Nephrology. *Pediatric Nephrology* **30**, 1467-1476.

72. Cheng, D., **Song, P.X.K.** and Liu, Z. (2014). Kidney paired donation system. *Chinese Journal of Nephrology, Dialysis & Transplantation* **23(4),** 385-289.

73. Spinale, J.M., Mariani, L.H., Kapoor, S., Zhang, J., Weyant, R., **Song, P.X.K.,** Wong, H.N., Troost, J.P., Gadegbeku, C.A., Gipson, D.S., Kretzler, M., Nihalani D. and Holzman,L.B. A. (2015). Reassessment of soluble urokinase-type plasminogen activator receptor in kidney disease, *Kidney International* **87**, 564-574.

74. Patel, M.R., Caldwell, C., **Song P.X.K**. and Wheeler, J.R.C. (2014). Risk Factors and outcomes associated with patient perceptions of asthma-related financial burden: Public vs. private health insurance in the United States in a high-risk group. *Annals of Asthma, Allergy and Immunology* **113**, 398-403.

75. Lachance, L., Benedict, M.B., Doctor, J.L., Gilmore, L.A., Kelly, C., Krieger, J., Lara, M., Meurer, J., Milanovich, A.F., Nicholas, E., Rosenthal, M., **Song, P.** , Stoll, S.C., Awad, D.F., Wilkin, M.K. and Clark, N.M. (2014). Asthma coalition effects on vulnerable sub groups of children: the most frequent users of health care and the youngest. *Journal of Asthma* **51(5),** 474-479.

76. Selewski, D. T. , Massengill, S. F., Troost, J., Wickman, L., Messer, K. L., Herreshoff, E., Bowers, C., Ferris, M. E., Mahan, J. D., Greenbaum, L. A., MacHardy, J., Kapur, G., Chand, D. H., Goebel, J., Barletta, G. M., Geary, D., Kershaw, D. B., Pan, C. G., Gbadegesin, R., Hidalgo, G., Lane, J. C., Leiser, J. D., **Song, P.**, Thissen, D., Liu, Y., Gross, H. E., DeWalt, D. A., Gipson, D. S. (2014). Gaining the Patient Reported Outcomes Measurement Information System (PROMIS) Perspective in Chronic Kidney Disease: a Midwest Pediatric Nephrology Consortium study. *Pediatric Nephrology* **29(12),** 2347-2356.

77. Ko, Y., **Song, PXK** and Clark, N.M. (2014). Declines with Age in Childhood Asthma Symptoms and Health Care Use: An Adjustment for Evaluations. *Annals of the American Thoracic Society* **11**, 54-62.

78. Gipson, D.S., Selewski, D.T., Massengill, S.F., Wickman, L., Messer, K.L., Herreshoff, E., Corinna, B., Ferris, M.F., Mahan, J.D., Greenbaum, L.A., MacHardy, J., Kapur, G., Chand, D.H., Goebel, J., Baletta, J.M. Geary, D., Kershaw, D.B., Pan, C.G., Gbadegesin, R., Hidalgo, G., Lane, J.C. Leiser, J.D., Plattner, B.W., **Song**, **PX**. Thissen, D., Liu, Y., Gross, H.M. and DeWalt, D.A. (2013). Gaining the PROMIS Perspective from Children with Nephrotic Syndrome: a Midwest Pediatric Nephrology Consortium Study. *Health and Quality of Life Outcomes* **11**:30.

79. Wickman, L., Afshinnia, F., Wang, S.Q., Yang, A., Wang, F., Chowdhury, M., Graham, D., Hawkins, J., Nishizono, R., Tanzer, M., Wiggins, J., Escobar, J.A., Rovin, B., **Song, P.** , Gipson, D., Kershaw, D. and Wiggins, R.C. (2013). Urine podocyte mRNAs, proteinuria and progression in human glomerular diseases. *Journal of the American Society of Nephrology* **24**, 2091-95.

80. Cibrik, D.M., Warner, R.L., Kommareddi, M., **Song, P.** Luan, F.L. and Johnson, K.J. (2013). Identification of a protein signature in renal allograft rejection. *Proteomics Clinical Applications* **7**, 839-849.

81. Barrantes, F., Luan, F. L., Kommareddi, M., Alazem, K., Yaqub, T., Roth, R. S., Sung, R. S., Cibrik, D. M., **Song, P.X.-K.** and Samaniego, M. (2013). History of Chronic Opioid Usage and Clinical Outcomes Post Kidney Transplantation. *Kidney International* **84**, 390-396.

82. Gadegbeku, C.A., D. S. Gipson, L. Holzman, A. O. Ojo, **Song, P.X.-K.,** L. Barisoni, M. G. Sampson, J. Kopp, K. Lemley, P. Nelson, C. Lienczewski, S. Adler, G. Appel, D. Cattran, M. Choi, G. Contreras, K. Dell, F. Fervenza, K. Gibson, L. Greenbaum, J. Hernandez, S. Hewitt, S. Hingorani, M. Hladunewich, M. Hogan, S. Hogan, F. Kaskel, J. Lieske, K. E.C. Meyers, P. Nachman, C. Nast, A. Neu, H. Reich, J. Sedor, C. Sethna, H. Trachtman, K. Tuttle, O. Zhdanova, G. Zilleruello, and M. Kretzler (2013). Design of the Nephrotic Syndrome Study Network (NEPTUNE): A Multi-Disciplinary Approach to Understanding Primary Glomerular Nephropathy. *Kidney International* **83(4):**749–756.

83. Ross, J., Yang, Y., **Song, P.X.-K.** and Clark, N.M. and Baptist, A.P. (2013).Quality of life, health care utilization, and control in older adults with asthma. *Journal of Allergy and Clinical Immunology* **1**, 157-162.

84. Baptist, A.P., Ross, J.A., Yang, Y., **Song, P.X-K.** and Clark, N.M. (2013). A randomized controlled trial of a self-regulation intervention for older adults with asthma. *Journal of the American Geriatrics Society* **61**, 747-753.

85. Gipson, D.S., Messer, K.L., Tran, C.L. Herreshoff1, E.G., Samuel, G.P., Massengill,S.F., **Song, P. X.-K.** and Selewski, D.T. (2013). Inpatient Healthcare Utilization in the United States Among Children with Nephrotic Syndrome. *American Journal of Kidney Diseases* **61**, 910-917.

86. Tanzer, M., Tran, C., Messer, K., Kroeker, A., Herreshoff, E., Wickman, L. Harkness, C., **Song, P.X.K.** and Gipson, D. (2013). Inpatient healthcare utilization by children and adolescents with systematic lupus erythematosus and kidney involvement. *Arthritis Care & Research* **65**, 382-390.

87. Clark, N.M., Lachance, L., Benedict, B., Doctor, J.L., Gilmore, L., Kelly, C., Krieger, J., Lara, M. Meurer, J., Milanovich, A. F., Nicholas, E., **Song, P.X.K.**, Rosenthal, M., Stoll, S.C., Wilkin, M. (2012). Improvements in health care use associated with community coalitions: Long term results of the Allies Against Asthma Initiative. *American Journal of Public Health* **103(6),** 1124-1127.

88. Clark, N.M., Baptist, A.P., Ko, Y., Leo, H.L. and **Song, P.X.-K.** (2012). The relationship of season of birth to asthma and allergy in urban African American children 10 to 13 years of age. *Journal of Asthma* **49**, 1037-1043.

89. Tran, C.L., Ehrmann, B.J. Messer, K.L., Herreshoffa, E., Kroekera, A., Wickman, L., **Song, P.X-K.**, Kaspera, N. and Gipson, D.S. (2012). Recent trends in healthcare utilization among children and adolescents with hypertension in the United States. *Hypertension* **60**, 296-302.

90. Heung, M., Wolfgram,D., Kommareddi, M., Hu, Y., **Song, P.X.-K.** and Ojo, A. (2012). Fluid overload at initiation of real replacement therapy is associated with lack of renal recovery in patients with acute kidney injury. *Nephrology Dialysis Transplantation* **27(3),** 956-961.

91. Norman, S.P., **Song, P. X.-K.**, Hu, Y. and Ojo, A.O. (2011). Transition from donor candidates to live donors: The impact of race and undiagnosed medical disease states. *Clinical Transplantation* **25**, 136-145.

Part III: Articles in Refereed Journals (Econometrics)

92. Feng, D., **Song, P.X.-K.** and Wirjanto, T.S. (2015). Time-deformation modeling of stock returns directed by duration processes. *Econometric Reviews* **34**, 480-511.
93. Alba, J.D., **Song, P. X.-K.** and Wang, P. (2013). Is There a Positive Association between M&A and Non-M&A FDI? Firm-level Evidence from Japanese FDI into US. *Singapore Economic Review* **58**, 1350028.
94. **Song, P.X.-K.,** Li, M. and Zhang, P. (2013). Vector Generalized Linear Models: A Gaussian Copula Approach. *Copulae in Mathematical and Quantitative Finance* edited by P. Jaworski, F. Durante and W.K. Hardle, 239-264, Springer: Berlin.

95. **Song, P. X.-K.,** Freeland, R.K. and Biswas, A. and Zhang, S. (2012). Statistical analysis of discrete-valued time series using categorical ARMA models. *Computational Statistics and Data Analysis* **57**, 112-124.

96. K. Yu, D. Shi, and **P. Song** (2010). First-order random coefficient integer-valued moving average process. Journal of Zhejiang University—Science Edition 37, 153–159.

97. Biswas, A. and **Song, P.X.-K.** (2009). Discrete-Valued ARMA Processes. *Statistics and Probability Letters* **79**, 1884-1889.

98. **Song, P.X.-K**. and D. Feng (2005). On parameter estimation for exponential dispersion ARMA models. *Journal of Time Series Analysis* **26**, 843-862.

99. Feng, D., Jiang, G. and **Song, P.X.-K.** (2004). Stochastic conditional duration models with "leverage effect" for financial transaction data. *Journal of Financial Econometrics* **2**, 390-421.

100. Jorgensen, B. and **Song, P.X.-K.** (1998). Stationary time-series models with exponential dispersion model margins. *Journal of Applied Probability* **35**, 78-92.

Software Packages

1. SAS Macro QIF (2006). Available on www-personal.umich.edu/~pxsong/qif_sas.html
2. R QIF Package (2009). Available on www-personal.umich.edu/~pxsong/qif_package.html
3. R HDDESIGN package (2012). Available on http://www-personal.umich.edu/~brisa/
4. R GeoCopula package (2014). Available on www-personal.umich.edu/~jiankang/software/GeoCopula.html

INVITED TALKS

1996
The National Laboratory, Los Alamos
Department of Mathematics and Statistics, York University, Toronto

1997
International Symposium on Multivariate Analysis, Hong Kong
97 SSC, Fredericton, NB
Department of Mathematics and Statistics, McMaster University
Department of Statistics and Actuarial Sciences, University of Waterloo

1998
The 4th ICSA Conference, Yunan University, China
Department of Applied Mathematics, TongJi University, China
Department of Mathematics, Sichuan University, China
Department of Statistics, University of Missouri-Columbia

1999
Department of Mathematics and Statistics, York University, Toronto
1999 SSC, University of Regina, SA
1999 ICSA Applied Statistics Symposium, Georgetown University
Zentrum Mathematik, Techische Universitat, Munchen, Germany
Department of Statistics and Demography, University of Southern Denmark, Odense
Department of Statistics, Northwestern University

2000
2000 SSC, University of Ottawa, Ottawa
Department of Statistics, UBC, Vancouver
Department of Mathematics and Statistics, University of Guelph, Canada

2001
Department of Statistics and Actuarial Science, University of Waterloo
Department of Statistics, Oregan State University
Canadian 01 Applied Statistics Conference, Concordia University, Canada
2001 Joint Statistical Meeting, Atlanta
2001 ICSA Conference, Hong Kong
Faculty of Mathematics, Sichuan University, China
Department of Applied Mathematics, Southwest Jiaotong University, China
Department of Mathematics and Statistics, York University, Toronto

2002
Department of Mathematics, University of North Carolina-Charlotte
School of Health Professions, University of North Carolina-Charlotte
The 3rd Statistics Workshop, University of Manitoba, Winnipeg, Canada
Department of Biostatistics, University of Michigan, Ann Arbor, MI

2003
Department of Biostatistics and Epidemiology, Cleveland Clinical Foundation
2003 Joint Statistical Meeting, San Francisco
Department of Statistics, University of Toronto
National Cancer Institute of Canada's Education Session
Department of Statistics, Oregon State University

2004
Department of Biostatistics, Harvard University

2005
Department of Mathematics and Statistics, McMaster University
2005 ENAR
Department of Mathematics and Statistics, University of Calgary
NPCDS Workshop, Banff, Alberta
2005 ICSA Applied Statistics Symposium in Washington DC
Department of Biostatistics, Georgetown University Medical Center

2006
Department of Mathematics and Statistics, Laval University
Department of Statistics and Applied Probability, Beijing University, China
Statistical Center, Chinese Academy of Sciences, China
Department of Statistics, University of Science and Technology of China
Faculty of Mathematics, Sichuan University, China
School of Statistics, Southwestern University of Finance and Economics, China
Department of Applied Mathematics, Chongqing, University, China
Faculty of Mathematics, University of Electronic Sciences of China
Department of Applied Mathematics, Southwest Jiaotong University, China
The 2006 SSC, London, Ontario
The 23rd IBC, Montreal, Quebec
Keynote Speech at the TABA, Prince Margaret Hospital
GSK Technical Meeting, Ontario, Canada

2007
NPCDS Workshop, Banff, Alberta
International Tobacco Control Seminar, University of Waterloo
A short course (instructor) on QIF, SAS Canada, Toronto
Keynote speech at Southern Ontario Graduate Students Seminar Day, U. of Toronto

2008
2008 ENAR, Arlington, Virginia
Department of Biostatistics, University of Pennsylvania
Department of Statistics, University of Manitoba
2008 SSC, Ottawa, Ontario
Department of Statistics, University of Padova, Italy
2008 WNAR, Davis, California
Department of Biostatistics, Columbia University

2009
2009 ENAR, San Antonio, Texas
2009 JSM, Washington DC
Department of Statistics, University of Illinois at Urbana-Champaign, Illinois
Department of Statistics, University of British Columbia, BC
Department of Statistics and Actuarial Science, Simon Fraser University, BC

Department of Statistics, Carnegie Mellon University

2010
MD Anderson Cancer Center, Houston
Division of Biostatistics, Washington University, St Louis
School of Statistics, University of Minnesota, Indianapolis
Interdisciplinary Group Seminar, University of Michigan, Ann Arbor
International Forum for Statistics and Community, Beijing, China
The first Biostatistics Symposium, Beijing, China
CEF-ERCIM 2010, London, UK

2011
Statistical Methods for HIV Research Workshop, Montreal
Department of Mathematics and Statistics, Bowling Green State University
ICSA Applied Statistics Symposium 2011, New York
The 4th Vine Copula Workshop, Munich, Germany
Weierstrass Institute of Statistics and Stochastics, Berlin, Germany
Institute of Nephrology, Nanjing, China
Biostatistics Symposium in HIV/AIDS and Cancer Studies, Changchun, China
Department of Biostatistics and Bioinformatics, University of Rochester
Department of Applied Mathematics and Statistics, University of Notre Dame

2012
ENAR 2012, Washington DC
BIRS Composite Likelihood Methods Workshop, Banff, Alberta
Department of Mathematics and Statistics, University of Calgary, Calgary
International Workshop on the Perspectives on High-dimensional Data Analysis II
SSC Annual Conference, Guelph, Ontario
ISNPS Conference, Greece
ICSA Applied Statistics Symposium, Boston
IMS Pacific Rim Conference, Tsukuba, Japan
Copulae 2012, Krakow, Poland
C.A.S.E. Humboldt-Universität zu Berlin, Berlin, Germany
Joint Statistical Meeting 2012, San Diego
School of Mathematics and Statistics, Lanzhou University, Lanzhou, China
Statistical Center, Peking University, Beijing
University of Maryland Greenebaum Cancer Center
Jack Kalbfleisch Symposium, Ann Arbor
Department of Biostatistics, Emory University, Atlanta
Department of Biostatistics, Indiana University School of Medicine, Indianapolis
Department of Statistics, University of Toronto, Toronto

2013
Department of Statistics and Applied Probability, National University of Singapore
Department of Mathematics, Nanyang Technological University, Singapore
Department of Statistics, Chinese University of Hong Kong
Department of Mathematics, Sun Yat-Sen University, China
School of Management, Sun Yat-Sen University, China
Department of Mathematics, Zhejiang University, China
Wang Yanan Institute for Studies in Economics, Xiamen University, China
Department of Mathematics, Technical University of Munich, Germany
Department of Biostatistics, University of Michigan
Department of Statistics, University of California at Riverside
School of Statistics, Southwest University of Finance and Economics, China
School of Information, Southwest Jiaotong University, China

ICSA 2013, Hong Kong
The 2nd HKUST International Forum on Probability and Statistics, Hong Kong
ECM2013, Hong Kong

2014
Department of Statistics and Probability, University of Michigan
ENAR 2014, Miami
The 3rd Workshop on Biostatistics and Bioinformatics, Georgia State University, Atlanta
Southwestern University of Finance and Economics, Chengdu, China
Southwest Jiaotong University, Chengdu, China
Zhejiang University, Hangzhou, China
The 3rd IBS-China Biostatistics Symposium, China
The 2014 IMS-PRAM Conference, Taiwan
Renmin University of China, Beijing
Xingjiang University, Urumqi, China
The 2014 Joint Statistical Meeting
BIRS Workshop on High-dimensional Data, Banff, Alberta
Spatial Copula Workshop, Muenster, Germany
Humboldt-Universität zu Berlin, School of Business and Economics, Berlin, Germany
Department of Statistics, University of Wisconsin Madison
Department of Biostatistics, Big Data Seminar Series, University of Michigan
York University, Toronto, Canada
CNSSI-CRM Workshop, Montreal

2015
ENAR 2015, Miami
Oberwolfach, Germany
Keynote Speech, BBACGR 2015, Qatar University, Doha, Qatar
The 24th International Workshop on Matrices and Statistics, Haikou, China
The 10th International Conference on "Frontiers of Statistics", Beijing, China
Shanghai University of Finance and Economics, Shanghai, China
Zhejiang University, Hangzhou, China
Southwestern University of Finance and Economics, Chengdu, China
ISI World Statistics Congress, Rio de Janeiro, Brazil
IASC 2015 Satellite Conference, Buzios, Brazil
Joint Statistical Meeting 2015, Seattle
EPA Epigenetics Workshop, Washington DC
University of Southern California, Los Angeles
Yale University, New Haven
University of North Carolina, Chapel Hill

RESEARCH GRANTS (PI/Co-PI GRANTS ONLY)

The **Natural Sciences and Engineering Research Council** of Canada (**NSERC**) **1997-1998**
Role: PI ($15,000/year)

Faculty of Arts York University Research Grant **1997-1998**
Role: PI ($$1,422)

The **Natural Sciences and Engineering Research Council** of Canada (**NSERC**) **1998-1999**
Role: PI ($16,500/year)

The **Natural Sciences and Engineering Research Council** of Canada (**NSERC**) **1999-2000**
Role: PI ($20,000/year)

The **Office of Navy Research** Award the 2004 Seventh New Researchers Conference **2003-2004**
Role: PI (US$10,000)

The **National Institute of Health** Award the 2004 Seventh New Researchers Conference **2003-2004**
Role: Co-PI (US$20,000)

The **National Science Foundation** Award the 2004 Seventh New Researchers Conference **2003-2004**
Role: Co-PI (US$20,000)

The **Natural Sciences and Engineering Research Council** of Canada (**NSERC**) **2004-2009**
Role: PI ($29,000/year)

The **National Science Foundation** Award **2009-2012**
Role: PI (US$149,845)

The **National Science Foundation** Training Award **2010-2012**
Role: PI (US$275,000)

The University of Michigan Injury Research Center Award **2011-2012**
Role: PI (US$25,000)

The **National Science Foundation** Award **2012-2015**
Role: PI (US$170,000)

The **National Institute of Health** Award **2013-2018**
Role: Subcontract PI (15% effort)

The **National Science Foundation** Award **2015-2018**
Role: PI (US$200,000)

The **National Institute of Health** Award **2015-2019**
Role: PI (US$1,293,989)

As Co-Investigator

Currently being involved in multiple NIH founded grants at various levels of effort percents.

GRADUATE STUDENTS SUPERVISION (PHD STUDENT ONLY)

2001
Zhenguo Qiu, Ph.D. Principle Advisor, York University, Canada
Thesis: *Simplex mixed models for longitudinal proportional data*

2003
Dingan Feng, Ph.D. Principle Advisor, York University, Canada
Thesis: *Stochastic models for high frequency financial time series*

Baifang Xing, Ph.D. Principle Advisor, York University, Canada
Thesis: *Best quadrature formulas, mixture of normal approximation and state space models*.

2006
Peng Zhang, Ph.D., Principle Advisor, University of Waterloo, Canada
Thesis title: *Contributions to linear mixed models for longitudinal data*

2009
Qian Zhou, Ph.D. Co-Advisor, University of Waterloo, Canada
Thesis title: *Information matrices in estimating function approach: Tests for model misspecification and model selection*. (This thesis won the Pierrer Robillard Award for the best PhD thesis in the areas of Statistics and Probability defended in 2009 at Canadian Universities.)

Bin Zhu, Ph.D. Co-Advisor, University of Michigan, USA
Thesis: *Stochastic dynamic models for functional data*

2011
Yun Bai, Ph.D. Principal Advisor, University of Michigan, USA
Thesis: *Joint composite estimating functions in spatial and spatio-temporal models.*

2012
Lijian (John) Li, PhD. Co-Advisor, University of Michigan, USA
Thesis: *Optimization and simulation of kidney paired donation programs* (A paper from the thesis won 2011 ENAR Student Paper Award)

Fei Wang, PhD, Co-Advisor, University of Michigan, USA
Thesis: *Development of joint estimating equation approaches to merging clustered or longitudinal datasets from multiple biomedical studies*

Youna Hu, PhD, Co-Advisor, University of Michigan, USA
Thesis: *Methods on efficient clinical trial designs and next-generation whole exome sequencing studies*

2013
Peisong Han, PhD, Co-Advisor, University of Michigan, USA
Thesis: *Conditional empirical likelihood approach to statistical analysis with missing data*

2014
Yan Zhou, PhD, Principal Advisor, University of Michigan, USA
Thesis: *Statistical methods for high-dimensional networked data analysis*

2015
Wei Ding, PhD, Principal Advisor, University of Michigan, USA
Thesis: *Copula regression models for the analysis of correlated data with missing values*

On-going
Lu Tang, PhD (3rd year), Principal Advisor, University of Michigan, USA
Wen Wang, PhD (3rd year), Principal Advisor, University of Michigan, USA
Mathieu Bray, PhD (3rd year), Principal Advisor, University of Michigan, USA

PROFESSIONAL ACTIVITIES

Service

Associate Editor of Statistica Sinica	**2011-2016**
Associate Editor of Canadian Journal of Statistics	**2007-2016**
Associate Editor of Sankhya (The Indian Journal of Statistics)	**2012-2016**
Guest Co-Editor of Statistics and Its Inference	**2011-2012**
Representative of the SSC to the Scientific Program Committee of the JSM	**2007-2009**
Member of the ENAR Regional Advisory Board	**2008-2010**
Chair of the ad hoc SSC Committee for New Investigators	**2007**
Member of the Organizing Committee of Workshop: Methodological Challenges in Public Health Research	**2006**

Chair of the Organizing Committee of the NPCDS Workshop: Current Issues the Analysis of Incomplete Longitudinal Data . **2002-2003**
Member of New Researchers Committee, IMS **2002-2005**
Director of Statistics Section, Department of Mathematics and Statistics**,** York University **2003-2004**
Program Chair of the 2004 New Researchers Conference, IMS **2002-2004**

Professional Affiliations

American Statistical Association, Statistical Society of Canada, International Chinese Statistical Association, Institute of Mathematical Statistics, International Biometric Society, International Statistical Institute,

Journals of Refereeing

Annals of Statistics, Journal of American Statistical Association, Biometrics, Canadian Journal of Statistics, Statistics in Medicine, Communication in Statistics, Lifetime Data Analysis, Journal of Statistical Planning and Inference, American Journal of Human Genetics, Journal of Multivariate Analysis, Computational Statistics and Data Analysis, Statistica Sinica, etc..

Grant Committee and Panels

Member of NSERC Grant Selection Committee **2009-2012**
NIH NIAID, Population Genetics **2009**
National Science Foundation **2015**
NIH NIEHS **2015**

PhD Thesis External Examiner

Department of Mathematics and Statistics, University of Guelph **2002**
Department of Statistics and Actuarial Science, University of Waterloo **2002**
Department of Statistical and Actuarial Science, University of Western Ontario **2003**
Department of Statistics, University of Manitoba **2008**
Department of Statistics, University of Toronto **2009**
Department of Mathematics and Statistics, University of Windsor **2011**
Department of Mathematics and Statistics, Queen's University **2012**
Zentrum Mathematik, Technische Universität München **2014**
Department of Statistics and Applied Probability, Singapore National University **2014**
Institute of Mathematical Sciences, University of Malaya **2015**