

Vita
LYNN KUO

Department of Statistics
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Ph.D. (1980), M.A. (1972), B.A. (1971), Cum Laude and Departmental Scholar (1970), all from the Department of Mathematics, University of California at Los Angeles

RESEARCH INTERESTS

Bioinformatics, Biostatistics, Computational Statistics, Nonparametric Bayesian Statistics, Bayesian Phylogenetics, Survival Analysis, Longitudinal Data Analysis, Decision Theory, Empirical Bayes Estimation, Software Reliability, Survey Sampling

WORK EXPERIENCE

Research Fellow, Statistical and Applied Mathematical Sciences Institute, NC, Spring 2009.

Assistant Professor (1986-1990), Associate Professor (1990-1996), and Professor (1996-present), Department of Statistics, University of Connecticut, Storrs (1990-1991 on leave, 1994-1995, 2001 – 2002, 2009 Spring, 2015 fall, sabbatical)

Visiting Research Professor, Department of Mathematics, National Taiwan University, August 2001 - January 2002

Statistician, Department of Community Medicine and Health Care, University of Connecticut, Farmington, 1999-2001

Visiting Scholar, Department of Statistics, Stanford University, 1994-1995, summers of 1988-1996 except 1991

Adjunct Professor, Department of Operations Research, Naval Postgraduate School, Monterey, CA, 1990-1991

Visiting Assistant Professor, Division of Statistics, University of California at Davis, 1985-1986

Research Fellow ASA/USDA, Statistical Survey Institute, Statistical Reporting Service, Research Division, U.S. Department of Agriculture, Washington, DC, 1984-1985

Assistant Professor, Department of Applied Mathematics and Statistics, State University of New York at Stony Brook, 1982-1986 (on leave, 1984-1986)

Visiting Assistant Professor, Department of Statistics, University of Michigan, Ann Arbor, 1980-1982

System Analyst, Deep Space Network Operation, Jet Propulsion Lab., Pasadena, CA, 1972 - 1975 - Tasks: To analyze the data limiter suppression factor and bandwidth specification of the subcarrier demodulator assembly. Provide the refraction model of rational polynomial fit for the antenna tracking system.

HONORS

Elected Member of International Statistical Institute, 2014

Outstanding Service Award from International Statistical Association, 2013.

Research Fellow, Statistical and Applied Mathematical Sciences Institute, NC, Spring 2009

Elected Fellow of American Statistical Association, 2003

Research Fellow, ASA/USDA, Statistical Survey Institute, Statistical Reporting Service, Research Division, U.S. Department of Agriculture, Washington, DC, 1984-1985

PUBLICATIONS

1. A Reexamination of the Subcarrier Demodulator Assembly Data Limiter Suppression Factor, (with L. Webster), Deep Space Network Progress Report, 42-28: Jet Propulsion Laboratory, May and June, 1975, 109-121.
2. Bayesian Bioassay Design, *Annals of Statistics*, V. 11, 1983, 886-895.
3. The Admissibility of the Empirical Distribution Function, (with M.P. Cohen), *Annals of Statistics*, V. 13, 1985, 262-271.
4. Minimax Sampling Strategies for Estimating a Finite Population Distribution Function, (with M.P. Cohen), *Statistics and Decisions*, V. 3, 1985, 205-224.
5. Computations of Mixtures of Dirichlet Processes, *SIAM Journal on Scientific and Statistical Computing*, V. 7, 1986, 60-71.
6. A Note on Bayes Empirical Bayes Estimation by Means of Dirichlet Processes, *Statistics and Probability Letters*, V. 4, 1986, 145-150.

7. Combining Preliminary Estimators of Totals for Livestock Surveys by Convex Programming, Proceedings, Section on Survey Research Methods, 1986, American Statistical Association, 460-465.
8. Linear Bayes Estimators of the Potency Curve in Bioassay, *Biometrika*, V. 75, 1988, 91-96.
9. Fixed Width Interval Estimation of the Largest Location of k Negative Exponential Populations, (with N. Mukhopadhyay), *Sequential Analysis*, V. 7, 1988, 321-332.
10. Classical and Prediction Approaches to Estimating Distribution Functions from Survey Data, Proceedings, Section on Survey Research Methods, 1988, American Statistical Association, 280-285.
11. Composite Estimation of Totals for Livestock Surveys, *Journal of American Statistical Association*, V. 84, 1989, 421-429.
12. A Class of Minimax Estimators of the Scale Parameter of the Uniform Distribution, (with A. Rukhin and D.K. Dey), *Statistics and Probability Letters*, V. 9, 1990, 317-321.
13. On the Admissibility of the Linear Estimators of the Poisson Mean Using Linex Loss Functions, (with D.K. Dey), *Statistics and Decisions*, V. 8, 1990, 201-210.
14. Multi Stage Point and Interval Estimation of the Largest Mean of K Normal Populations and the Associated Second Order Properties, (with N. Mukhopadhyay), *Metrika*, V. 37, 1990, 291-300.
15. Point Estimation of the Largest Location of k Negative Exponential Populations, (with N. Mukhopadhyay), *Sequential Analysis*, V. 9, 1990, 297-304.
16. Empirical Bayes Estimation for the Quarterly Hog Series" (with P.W. Cook), in Proceedings, Section on Survey Research Methods, 1990, American Statistical Association, 314-319.
17. A New Empirical Bayes Estimator with Type II Censored Data, (with D.K. Dey), *Computational Statistics & Data Analysis*, 1991, V. 12, 271-279.
18. Nonparametric Bayesian Bioassay Including Ordered Polytomous Response, (with A. E. Gelfand), *Biometrika*, 1991, V. 78, 657-666.
19. Sampling Based Approach to Computing Nonparametric Bayesian Estimators With Doubly Censored Data, Proceedings 23rd Symposium on the Interface between Computer Science and Statistics, 1991, 612-615.
20. Improved Sequential and Accelerated Sequential Procedures for Estimating the Scale Parameter in a Uniform Distribution, (with N. Mukhopadhyay and T.K.S. Solanky),

- Sequential Analysis, 1991, 235-246.
21. Inference for the Maximum Cell Probability under Multinomial Sampling, (with A.E. Gelfand, J. Glaz, and T.M. Lee), *Naval Research Logistics*, 1992, V. 39, 97-114.
 22. Bayes Computations in Survival Models via the Gibbs Samplers, (with A.F.M. Smith), (1992), in *Survival Analysis: State of the Art*, eds. J.P. Klein and P.K. Goel, Dordrecht: Kluwer Academic, 11-24 (with discussion).
 23. A Sampling Based Approach to Software Reliability, (with T. Yang), 1993 Proceedings of the Statistical Computing Section, American Statistical Association, 165-170.
 24. Empirical Bayes Risk Evaluation with type II Censored Data, (with C. Yiannoutsos), *Journal of Statistical Computation and Simulation*, 1993, V. 48, 195-206.
 25. Minimax Estimation of a Variance, (with T.S. Ferguson), *Annals of the Institute of Statistical Mathematics*, 1994, V. 46, 295-308.
 26. A Unified Approach to the Nonhomogeneous Poisson Process in Reliability Modeling, (with T. Yang), 1994 Proceedings of the Physical & Engineering Sciences Section, American Statistical Association, 169-174.
 27. Nonparametric Bayesian Inference for Accelerated Failure Time Model, (with B. Mallick), 1994 Proceedings of the Section on Bayesian Statistical Science, American Statistical Association, 90-95.
 28. Bayesian Computation for Software Reliability, (with T. Yang), *Journal of Computational and Graphical Statistics*, 1995, V. 4, 65-82.
 29. An Analogy Between the Nonparametric Problems of Estimating a Distribution Function and the Parametric Problems, (with Q. Yu), *Sankhya, A.*, 1995, V. 57, 472-485.
 30. A Bayesian Predictive Approach to Determining the Number of Components in a Mixture Distribution, (with D. Dey and S. Sahu), *Statistics and Computing*, 1995, 297-305.
 31. Bayesian Inference for Superposition of Nonhomogeneous Poisson Processes, (with T. Yang), 1995 Proceedings of the 50th Session, The International Statistical Institute, 647-648.
 32. An Interval Estimate for the Intraclass Correlation in Beta Binomial Sampling, (with K. J. Lui and W.G. Cumberland), *Biometrics*, 1996, V. 52, 412-425.
 33. Confidence Limits for the Intraclass Correlation in Compound Poisson Sampling, (with K.J. Lui), *Biometrical Journal*, 1996, V. 38, 231-239.
 34. Bayesian Computation for Nonhomogeneous Poisson Processes in Software Reliability,

- (with T. Yang), *Journal of the American Statistical Association*, 1996, V. 91, 763-773.
35. Bayesian Variable Selection for Regression Models, (with B. Mallick), 1996 Proceedings of the Section on Bayesian Statistical Science, American Statistical Association, 170-175.
 36. Bayesian Computation for NHPP-K Software Reliability Growth Models, (with J. Lee, K. Choi, and T. Yang), 1996 Proceedings of the Section on Physical and Engineering Sciences, American Statistical Association, 117-122.
 37. Bayes Inference for Technological Substitution Data with Data Based Transformation, (with J. Lee, P. Cheng and J. Pai), *Journal of Forecasting*, 1997, V. 16, 65-82.
 38. Bayesian Inference for S-shaped Software Reliability Growth Models, (with J. Lee, K. Choi and T. Yang), *IEEE Transactions on Reliability*, 1997, V. 46, 76-80.
 39. Bayesian Semiparametric Inference for the Accelerated Failure Time Model, (with B. Mallick), *Canadian Journal of Statistics*, 1997, V. 25, 457-472.
 40. Sampling Based Approach to One-Hit and Multi-Hit Models in Quantal Bioassay, (with H.M. Chu), *Statistics and Computing*, 1997, V. 7, 183-192.
 41. Variable Selection for Regression Models, (with B. Mallick), 1998, *Sankhya B*, V. 60, 65-81.
 42. Bayesian Analysis for Multi-Stage Linearized Models in Quantal Bioassay, (with M.P. Cohen), 1999, *Biometrical Journal*, V. 41, 53-69.
 43. Software Reliability (Update), in *Encyclopedia of Statistical Sciences*, Update, V. 3, 1999, editors: S. Kotz, C.B. Read, and D. Banks, 671-680.
 44. Optimal Design for Quantal Bioassay via Monte Carlo Methods, (with R. Soyer and F. Wang), 1999 in *Bayesian Statistics 6*, editors: J.M. Bernardo, J.O. Berger, A.P. Dawid, and A.F.M. Smith, 795-802.
 45. Bayesian Computation for the Superposition of Nonhomogeneous Poisson Processes" (with T. Yang), *Canadian Journal of Statistics*, 1999, V. 27, 547-556.
 46. A Mixture-Model Approach to the Analysis of Survival Data, (with F. Peng), 2000, in *Generalized Linear Models: A Bayesian Perspective*, editors: D.K. Dey, S.K. Ghosh, and B.K. Mallick, Marcel Dekker, 255-270.
 47. Bayesian Reliability Modeling for Masked System Lifetime Data, (with T. Yang), *Statistics and Probability Letters*, 2000, V. 47, 229-241.
 48. Book Review: *Markov Chain Monte Carlo* by Dani Gamerman, *Technometrics*, 2000, V. 42, 216.

49. Parametric Discrete Choice Models Based on Scale Mixtures of Multivariate Normal Distributions, (with Z. Chen), Proceedings of the ASA section on Bayesian Statistical Science, 2000, American Statistical Association, 50 - 55.
50. A Note on the Estimation of the Multinomial Logit Model with Random Effects, (with Z. Chen), The American Statistician, 2001, V. 55, 89-95.
51. Bayesian Binary Segmentation Procedure for a Poisson Process, (with T. Yang), Journal of Computational and Graphical Statistics, 2001, V. 10, 772-785.
52. Estimation of Bivariate Measurements Having Different Change Points, with Application to Cognitive Ageing, (with C. Hall, J. Ying, M. Sliwinski, H. Buschke, M. Katz and R. B. Lipton), Statistics in Medicine, 2001, V. 20, 3695-3714.
53. Discrete Choice Models Based on the Scale Mixtures of Multivariate Normal Distributions, (with Z. Chen), Sankhya B, 2002, V. 64, 192-213.
54. Bayesian and Profile Likelihood Change Point Methods for Modeling Cognitive Function Over Time, (with C. Hall, J. Ying, and R. Lipton), Computational Statistics and Data Analysis, 2003, V. 42, 91-109.
55. A Bayesian Portfolio Allocation Model on Asset Return, (with Jun Ying), Proceedings of the ASA section on Bayesian Statistical Science, 2003, American Statistical Association, 4664-4671.
56. A State Duration Model for Brand Choice and Inter-purchase Time, (with Z. Chen), Journal of Data Sciences, 2004, V.2, 125-147.
57. Managing Software Development Process (with I.R. Chiang), 2004, in Mathematical Reliability: an Expository Perspective, eds: R. Soyer, T.A. Mazzuchi, and N. Singpurwalla, Kluwer, Boston, 233-248.
58. Forecasting Stock Prices Using a Hierarchical Bayesian Approach, (with J. Ying, G. Seow), Journal of Forecasting, 2005, V. 24, 39-59.
59. Expression Profile of Osteoblast Lineage at Defined Stages of Differentiation, (with I. Kalajzic, A. Staal, W-P Yang, Y. Wu, S. E. Johnson, J. H. M. Feyen, W. Krueger, P. Maye, F. Yu, Y. Zhao, R. Gupta, L.E.K. Achenie, H-W Wang, D-G. Shin, and D. W. Rowe), Journal of Biological Chemistry, 2005, July, V. 280, 24618-24626.
60. Software Reliability, in Bayesian Thinking: Modeling and Computation, Handbook of Statistics Vol. 25, eds: D.K. Dey and C. R. Rao, 2005, Elsevier, Amsterdam, Chapter 33, 929-963.
61. Calibration Methods for Selecting Differentially Expressed Genes, (with F. Yu and M. H.

- Chen) Proceedings of the ASA section on Bayesian Statistical Science, 2005, American Statistical Association.
62. A New Time Varying Frailty Model for Recurrent Events, (with C. Song). Proceedings of the ASA section on Bayesian Statistical Science, 2005, American Statistical Association
 63. An Improved Collapsed Gibbs Sampler for Dirichlet Process Mixing Models, (with T.Y. Yang), Computational Statistics and Data Analysis, 2006, V.50, 659-674.
 64. Targeted vs. Daily Naltrexone: Secondary analysis of Effects on Average Daily Drinking, (with C. A. Hernandez-Avila, C. Song, H. Tennen, S. Armeli, H. R.Kranzler), Alcoholism: Clinical and Experimental Research, 2006, 860-865.
 65. Differentiated Cells Are More Efficient Than Adult Stem Cells for Cloning by Somatic Cell Nuclear Transfer (with L.Y. Sung, S. Gao, H. Shen, H.Yu, Y. Song, S. L. Smith, C.C.Chang, K. Inoue, J. Lain, A. Li, X. C. Tian, D. P. Tuck, S. M. Weissman, X. Yang, T. Cheng), Nature Genetics, 2006, V. 38, No. 11, 1323-1328.
 66. Bayesian Pathways Studies Using Microarray Data, (with Xie, W.,Shin, D.G.,Yu F.,Zhao, Y., Chen, M-H., Rowe, D.) 2007 JSM Proceedings, Bayesian Statistical Science Section [CD-ROM], Alexandria, VA: American Statistical Association, 1303-1309.
 67. Bayesian Modeling for Masked Data, in Encyclopedia of Statistics in Quality and Reliability (2008) Eds: F. Ruggeri, R. Kenett, and F. Faltin, Wiley & Sons. 1042-1050.
 68. Detecting Differentially Expressed Genes Using Calibrated Bayes Factors (with F. Yu, and M. H. Chen), Statistica Sinica, 2008, V. 18, 783-802.
 69. Statistical Methods for Identifying Differentially Expressed Genes in Replicated Microarray Experiments: A Review, (with F. Yu, and Y. Zhao). 2008, Chapter 20, in Statistical Advances in the Biomedical Sciences: Clinical Trials, Epidemiology, Survival Analysis and Bioinformatics, Eds: Biswas, A., Datta, S., Fine, J., and Segal, M., Wiley, 341-363.
 70. A Preliminary Study on Combining Classifiers for Selecting Differentially Expressed Genes, (with Y. Zhao, W. Xie, F. Yu) 2008 JSM Proceedings, Business and Economics Statistics Section [CD-ROM], Alexandria, VA: American Statistical Association: pp2984-2990.
 71. Identification of Differentially Expressed Genes between Osteoblasts and Osteocytes, (with F. Paic, J.C. Igwe, N. Ravi, M. S. Kronenberg, T. Franceschetti, P. Harrington, D-G Shin, DW Rowe, SE Harris, I. Kalajzic), Bone, 2009, V. 45, 682-692.
 72. PBC: A Software Framework Facilitating Pattern-Based Clustering for Microarray Data Analysis, (with D-G Shin, S-H. Hong, P. Joshi, R. Nori, B. Pei, H-W. Wang, P. Harrington, I. Kalajzic, DG Rowe), Proceedings of the International Joint Conference on Bioinformatics, Systems Biology and Intelligent Computing, 2009, 30 – 36.

73. Bayesian Choice of Links and Computation for Binary Response Data, (with MH Chen, S. Kim, and W. Xie) in *Frontiers of Statistical Decision Making and Bayesian Analysis*, in Honor of James O. Berger, Eds: MH Chen, D.K. Dey, P. Muller, D. Sun, and K. Ye, Springer, 2010, 451-466.
74. Bayesian Hierarchical Modeling and Selection of Differentially Expressed Genes for the EST Data, (with F. Yu, M-H. Chen, P. Huang & W. Wang), *Biometrics*, 2011, V. 67, 142-150.
75. Choosing among Partition Models in Bayesian Phylogenetics, (with F Yu, R Wu; MH Chen; P O. Lewis) *Molecular Biology and Evolution* 2011; 28(1), 523-532.
76. Bayesian Methods for Detecting Differentially Expressed Genes, (with F. Yu, MH Chen) in *Bayesian Modeling in Bioinformatics*, Eds: Dey, D.K., Ghosh, S. and Mallick, B., CRC Press, 2011, 365-387.
77. Improving Marginal Likelihood Estimation for Bayesian Phylogenetic Model Selection, (with W. Xie, P.O. Lewis, Y. Fan, & M-H Chen), *Systematic Biology* 2011; 60(2), 150-160.
78. Multi-Stage Transitional Models with Random Effects and Its Application to the Einstein Aging Study, (with C. Song, C. A. Derby, R. B. Lipton, and C. B. Hall), *Biometrical Journal*, 2011, V. 53(6), 938-955.
79. A Bayesian Approach to Pathway Analysis by Integrating Gene-Gene Functional Directions and Microarray Data, (with Y. Zhao, MH Chen, B. Pei, D. Rowe, D-G Shin, W. Xie, and F. Yu), *Statistics in Biosciences*, 2012, V. 4(1), 105-131; DOI 10.1007/s12561-011-9046-1.
80. University of Connecticut Department of Statistics, (with D.K. Dey, N. Mukhopadhyay, MH Chen), in *Strength in Numbers: The Rising of Academic Statistics Departments in the U. S.*, Springer Science + Business Media, New York
81. Dynamic Frailty and Change Point Models for Recurrent Events Data, (with C. Song), *Journal of the Iranian Statistical Society*, 2013, V. 12 (1) 127-151.
82. A Conditional Autoregressive Model for Detecting Natural Selection in Protein-Coding DNA Sequences. (with Y. Fan, R. Wu, MH Chen, and P.O. Lewis) in *Topics in Applied Statistics*, 2012 Symposium of the International Chinese Statistical Association, Eds: M.Hu, Y. Liu, & J. Lin, Springer, 2013, 203-212.
83. Posterior Predictive Bayesian Phylogenetic Model Selection, (with P.O. Lewis, W. Xie, M.H. Chen & Y Fan), *Systematic Biology* 2014; 63(3), 309-321
84. A New Method for Tracking Configuration for Dirichlet Process Sampling (with R. Wu, M. H. Chen, P. O. Lewis), *Sri Lankan Journal of Applied Statistics*, Special Issue: Modern Statistical Methodologies in the Cutting Edge of Science.2014, Dec. 1-24.

85. Combining P Values for Gene Set Analysis (with Z. Wei), in Applied Statistics in Biomedicine and Clinical Trials Design: Selected Papers from 2013 ICASA/ISBS Joint Statistical Meetings, Eds: Zhen Chen, Aiyi Liu, Yongming Qu, Larry Tang, Naitee Ting, Yi Tsong, Springer, 2014, 495-518.
86. Nonparametric Bayesian Functional Clustering for Time-Course Microarray Data (with Z. Wei), Statistics and Its Interface, V. 7, 2014, 543-557.
87. Consistency of marginal likelihood estimation when topology varies. (with R. Wu, M-H. Chen, and P.O. Lewis) pp. 113-128 in: Chen, M.-H., L. Kuo, and P.O. Lewis (eds.). 2014. Bayesian phylogenetics: methods, algorithms, and applications. Chapman & Hall/CRC Mathematical and Computational Biology.
88. Confident difference criterion: a new Bayesian differentially expressed gene selection algorithm with applications (with F. Yu, M-H. Chen, H. Talbott and J. S. Davis) BMC Bioinformatics 2015,16:245 doi:10.1186/s12859-015-0664-3
89. Increasing Radiation Dose Improves Immunotherapy Outcome and Prolongation of Tumor Dormancy in a Subgroup of Mice Treated for Advanced Intracerebral Melanoma (with H. M. Smilowitz, P.L. Micca, D.Sasso, Q. Wu, N.Dyment, C. Xue) Cancer Immunol Immunother 2016, Feb;65(2): 127-139, DOI 10.1007/s00262-015-1772-7
90. Effects of High Hydrostatic Pressure on Expression Profiles of In Vitro Produced Vitri-fied Bovine Blastocysts. (with Z. Jiang, P. Harrington, M. Zhang, S.L. Marjani, J. Park, C. Pribenszky, X. Tian) Nature, Scientific Reports 6, 2016, 21215. DOI:10.1038/srep21215 (2016). PMID: 26883277 (PubMed- in process) PMCID: PMC4756375.
91. Estimating Bayesian Phylogenetic Information Content (with P.O. Lewis, M.H. Chen, L.A. Lewis, K. Fučíková, S. Neupane, Y. B. Wang, and D. Shi) Systematic Biology, 2016, 65(6): 1009-1023.
92. Managing Risk-Adjusted Resource Allocation for Project Time-Cost Tradeoffs (with M. Nunez and R. Chiang) Annals of Operations Research. 2016, in press. DOI.10.1007/s10479-016-2122-7
93. A New Monte Carlo Method for Estimating Marginal Likelihoods (with Y.B. Wang, M. H. Chen, and P. Lewis) Bayesian Analysis, 2018, 13(2), 311-333.
94. Risk Analysis of Use of Different Classes of Antidepressants on Subsequent Dementia: A Nationwide Cohort Study in Taiwan (with C.K. Then, N.F. Chi, K.H. Chung, K.H. Liu, C. – J. HU, S. C. Shen, Y.K. Lin) PLoS ONE. 2017, 12(4): e0175187, DOI: 10.1371/journal.pone.0175187, 1-17.
95. A Tailored Multivariate Mixture Model for Detecting Proteins of Concordant Change Among Virulent Strains of *Clostridium Perfringens* (with K. Chen, N. Mishra, J. Smyth, H.

Bar, E. Schifano, M.H. Chen) *Journal of American Statistical Association*, (2018) 113(522): 311-333.

96. An Improved Enzyme-Linked Immunoassay for the Detection of *Leptospira*-Specific Antibodies. (with H.-W. Chen, H. Lukas, K. Becker, G. Weissenberger, E. S. Halsey, C. Guevara, E. Canal, E. Hall, R. C. Maves, D. H. Tilley, T. J. Kochel, W.-M. Ching) *American Journal of Tropical Medicine & Hygiene* 2018, 99(2):266-274.
97. Variable Selection for Bayesian Survival Models Using Bregman Divergence Measure, (with D. Shi) *Probability in the Engineering and Informational Sciences*. 2018, in press.
98. Dosage Compensation of the X Chromosomes in Bovine Germline, Early Embryos and Somatic Tissues. (with Duan, J., Shi, W., Jue, N., Jiang, Z., O'Neill, R. J., Wolf, E., Dong, H., Zheng, X., Chen, J., Tian, X.) *Genome Biology and Evolution* (2018) 11 (1), 242-252.
99. Assessing Combinability of Phylogenomic Data using Bayes Factors. (with S. Neupane, K. Fučíková, L. Lewis, M.-H. Chen, P. O. Lewis) *Systematic Biology*, 2019, 68(5):744-754. <https://doi.org/10.1093/sysbio/syz007>
100. Partition Weighted Approach for Estimating Marginal Posterior Density with Applications. (with Y.-B. Wang, M.-H. Chen, and P. Lewis) *Journal of Computational and Graphical Statistics*, 2019, 28:2, 334-349 (<https://doi.org/10.1080/10618600.2018.1529600>,).
101. Software Reliability. (with Robert Chiang). 2019. pp1-10, Wiley StatsRef: Statistics Reference Online: 2014-2019. John Wiley & Sons, Ltd. doi:10.1002/9781118445112.stat05035.pub2
102. Inflated density ratio and its variation and generalization for computing marginal likelihoods. (with Y.-B. Wang, M.-H. Chen, W. Shi, and P. Lewis) *Journal of the Korean Statistical Society* (2020) 49:244–263, doi: 10.1007/s42952-019-00013-z.

MANUSCRIPTS AVAILABLE IN DRAFT FORM

1. “A Simple Asymptotically Distribution Free Interval Estimate of the Intraclass Correlation under Balanced Sampling” (with K.J. Liu and W.G. Cumberland).
2. “Sampling Based Approach to Inference for Multi State Models with Survival/Sacrifice Data” (with H.M. Chu).
3. “Bayesian Nonparametric Inference for Nonhomogeneous Poisson Processes” (with S. Ghosh).

EDITED BOOK

Bayesian Phylogenetics: Methods, Algorithms, and Applications, (eds: with MH Chen, & P. Lewis), 2014, Chapman & Hall (CRC).

GRANTS

Statistical Work and Collaboration with Albert Einstein College of Medicine, supported by the Intramural Research Program, National Institute on Aging, National Institutes of Health, via Einstein Medical School, 7/25/2017-12/31/2019

Conducting Statistical Research for Chronic Kidney Disease (CKD) Drug Development, supported by Boehringer Ingelheim Corporation, 12/31/19-12/31/2020.

Disparities in Breast Cancer: Is Elevated Serum sLag-3 Predictor of More Aggressive Disease in African-American Women with Breast Cancer? (Biostatistician, H. Smilowitz-PI, H. Swift-Co-PI) supported by Connecticut Breast Health Initiative 9/1/2015-8/31/2017.

Estimating the Bayesian Phylogenetic Information Content of Systematic Data (Co-PI, Paul Lewis-PI) DEB1354146, supported by NSF 9/1/2014-8/31/2020.

CC-NIE Network Infrastructure: Enabling Data-Intensive Research at the University of Connecticut Through Science DMZ (Bing Wang-PI) ACI1341003, supported by NSF, 11/1/2013-10/31/2015.

Characterization of Novel Pathways Involved in Mediating Plant-Derived Molecule Inhibition of Staphylococcus Aureus Infection of Bovine Mammary Gland (Co-PI, Kristen Govoni-PI), 2012-67016-30210, supported by USDA/NIFA, 1/1/2012 - 12/31/2015

Graduate Assistance in Areas of National Need Materials Science and Engineering (Mei Wei-PI), P200A090315, supported by Department of Education, 8/15/2009-8/14/2012.

Cluster Machine for Multi-Disciplinary Biomedical Computing, (Co-PI, Dong-Guk Shin-PI), supported by University of Connecticut Research Foundation 2/1/2011-2/1/2012

UConn Craniofacial Tissue Repair Regeneration Program, 2004-2009, (Susan Resine-PI), U24DEO16495, supported by NIH/NIDCR.

Phosphoflow and Bayesian Network Analysis of CTL Activation (Co-PI, Adam Zweifach-PI), Faculty Large Grant 2008, UConn Research Foundation.

Directing hES Derived Progenitors Cells into Musculoskeletal Lineages, Project 3: Microarray and Genetic Networks 2007-2010 (David Rowe-PI, Donguk Shin and Lynn Kuo Co-PIs), 06SCC04, supported by Connecticut State, Connecticut Innovations.

Expression Profiling the Osteoprogenitor Lineage (Workshop Support), 2004-2006 (David Rowe-PI) R13 DK070516-01, supported by NIH/NIDDK.

Integrated Bioinformatics Center for Cellular Biology, 2002-2009 (Donguk Shin-PI) P20 GM65764-02, supported by NIH/NIGMS.

Scientific Computing Research Environments for the Mathematical Sciences (SCREMS), 2002-2003, DMS-0214643, supported by National Science Foundation.

Study on Functional Data, 2001-2002, (joint with Hung Chen) supported by the National Science Council, Republic of China.

Statistical Methods in Aging Research, 2001, supported by the UConn Health Center.

Vital Signs Project-Storrs Component, 1999 - 2001, supported by the UConn Health Center, funded by Patrick and Catherine Weldon Donaghue Medical Research Foundation.

Scientific Computing Research Environments for the Mathematical Sciences (SCREMS) DMS 9872013, 1998 - 2000, supported by the National Science Foundation.

Public Private Alliance for Prevention, (Joint with Charles Hall-PI and Dipak Dey) supported by Patrick and Catherine Weldon Donaghue Medical Research Foundation, 1998 -1999.

Bayesian and Sequential Design for Sensitivity Tests, 1990 - 1991, supported by Research Administration of Naval Postgraduate School.

Mathematical Sciences: Nonparametric Bayesian Inference and Gibbs Sampling, 1990 - 1991, DMS-9008021, supported by National Science Foundation.

Mathematical Sciences Research Equipment, DMS-8905633 (Joint with Richard A. Vitale PI and Dipak Dey), 1989, supported by National Science Foundation.

Study in System Reliability and Maintenance, AFOSR-A87-0072 (Joint with Michael Katehakis-PI and Herbert Robbins), supported by U.S. Air Force Office of Scientific Research.

Maintenance Policies and Inference in Reliability, AFOSR0136 (Joint with Michael Katehakis PI and Herbert Robbins), supported by U.S. Air Force Office of Scientific Research.

COOPERATIVE AGREEMENT

Research and Development of Empirical Bayes Estimation Methodology for NASS Surveys, supported by U.S. Department of Agriculture, National Agricultural Statistics Service (1988-1990).

COURSES TAUGHT

1. Undergraduate
Elements of Probability
Introduction to Probability Theory

Introduction to Probability and Statistics
Introduction to Biostatistics
Elementary Statistics
Statistical Methods
Elementary Stochastic Processes
Analysis of Variance
Regression
Statistical Computing
Undergraduate Seminar I and II

2. Graduate

Introduction to Biostatistics
Stein's Phenomenon and its Generalization
Estimation
Advanced Survey Sampling
Nonparametric Bayesian Statistics and Survival Analysis
Topics in Decision Theory
Mathematical Statistics, I, II
Applied Statistics
Advanced Mathematical Statistics
Statistical Inference I, II
Statistics for Science and Engineering
Statistics for Management
Analysis of Experiments
Design of Experiments
Survival Analysis
Bioinformatics
Nonparametric Bayesian Inference in Biostatistics
Investigation of Special Topics

INVITED PRESENTATIONS

"Bayes empirical Bayes estimations by means of mixtures of Dirichlet processes",
The University of Michigan, Ann Arbor 1980

"Bayesian bioassay design",
Michigan State University, East Lansing 1981

"Minimax sampling strategies for estimating a finite population distribution function",
The University of Michigan, Ann Arbor 1981
Case Western Reserve University 1982
Ohio State University, Columbus 1982
North Carolina State University, Raleigh 1982
State University of New York, Stony Brook 1982
Michigan State University, East Lansing 1982

- "Nonparametric Bayesian statistics",
State University of New York, Stony Brook 1983
- "The admissibility of the empirical distribution function",
Yale University 1984
- "Nonparametric Bayesian statistics",
Brookhaven National Laboratory 1984
- "Composite estimation of totals for livestock surveys",
Washington Statistical Society 1985
- "Linear Bayes estimators for sensitivity experiments",
Reliability Workshop, Virginia 1985
- "The admissibility of the empirical distribution function",
University of California, Davis 1985
Iowa State University 1986
The University of Iowa 1986
The University of Connecticut 1986
- "Estimation of distribution functions",
Academia Sinica, Republic of China 1986
National Tsing-Hua University, Republic of China 1986
- "Estimating a bivariate distribution function with partially missing data",
Columbia University 1987
The University of Connecticut 1987
- "Sequential estimation of the largest location of k negative exponential populations",
University of Massachusetts, Amherst 1988
- "Composite estimation of totals for livestock surveys",
University of Connecticut 1988
- "Multi-stage point and interval estimation of the largest mean of k normal populations and the associated second order properties",
Mini-Conference on Sequential Statistical Analysis Syracuse University, New York
1989
- "Minimax estimation of a variance",
The University of Connecticut 1989
University of Minnesota 1989
Harvard University 1990
Naval Postgraduate School – 1990

Stanford University 1990

"Gibbs sampling for marginal posterior densities",
Naval Postgraduate School 1990
University of California at Riverside 1991

"Gibbs Sampling for quantal bioassay",
University of California at Santa Barbara 1991

"Nonparametric Bayesian bioassay including ordered polytomous response",
Stanford University 1991

"Gibbs sampling approach to quantal bioassay",
Midwest Biopharmaceutical Statistical Workshop 1992

"Bayesian analysis for linearized multi-stage models in quantal bioassay",
Joint Meeting of ENAR, ASA and IMS, Philadelphia, 1993
Stanford University 1993
Joint Uconn UMass Colloquium 1993

"Nonparametric Bayesian inference for accelerated failure time modes",
Joint Statistical Meetings, Toronto 1994

"Variable selection for regression models",
Stanford University 1995
University of California at Davis 1995
International Chinese Statistical Association Conference, Beijing, 1995

"Bayesian computation for nonhomogeneous Poisson processes in software reliability",
Sixteenth Minnowbrook Workshop on Software Engineering 1994
Institute for Operations Research and the Management Sciences Meetings, Washington,
D.C. 1996

"Bayesian variable selection for regression models",
Joint Statistical Meetings, Chicago 1996

"Bayesian nonparametric inference for nonhomogeneous Poisson processes",
George Washington University 1997
Korea University, Seoul 1997
National Chiao Tung University, Taiwan 1997
Worcester Polytechnic Institute 1997

"Bayesian semiparametric inference for the accelerated failure time model",
The IMS Asian and Pacific Regional Meeting Joint with CIPS and CSA 1997

"Bayesian reliability modeling for masked system lifetime data"

The Joint Statistical Meetings in Anaheim, CA (special topic contributed session), 1997
International Chinese Statistical Association Applied Statistics Symposium, New
London, CT 1998

"The Bayesian bootstrap and multiple imputation for item nonresponse",
International Conference on Current Topics in Survey Sampling, Lincoln, NE 1997

"Sampling based approach to inference for multi-state models with survival/sacrifice
data",

Harvard Biostatistics Department 1998.

International Conference in Reliability and Survival Analysis, DeKalb, IL 1998

The 4th International Chinese Statistical Association Conference, Kunming, China. 1998

"Bayesian binary segmentation procedure for a Poisson process",
Institute for Operational Research and the Management Science Meetings, Philadelphia
1999

"Bayesian nonparametric inference for nonhomogeneous Poisson processes",
Institute for Operational Research and the Management Science Meetings, Philadelphia
1999

"A composite transition model for brand choice and purchase timing data",
University of Waterloo 1998
Hong Kong Science and Technology University - 1999
International Conference on Statistics in the 21st Century - Orono, Maine - 2000
Academia Sinica, Republic of China - 2000
Fu Jen University, Republic of China - 2002

"A composite transition model for duration and state data",
International Chinese Statistical Association 1999 Applied Statistics
Symposium, Washington, D.C. 1999
Yale University 2000
UConn-UMass - 2000

"Optimal design for portfolio selection",
International Society for Bayesian Analysis, Sixth World Meeting, Hersonissos, Crete,
Greece - 2000
Academia Sinica, Republic of China - 2000

"Further Development on the Mixture of Dirichlet Processes",
The Joint Statistical Meetings in Indianapolis, IN (special topic contributed session), -
2000

"Bayesian Binary Segmentation Procedure for a Poisson Process",
The Second Workshop on Bayesian Inference in Stochastic Processes, Varenna, Italy -
2001

“An Improved Collapsed Gibbs Sampler for Dirichlet Process Mixing Models”,
The International Chinese Statistical Association, the Applied Statistics Symposium,
Chicago - 2001

Academia Sinica, Republic of China - 2002

National Chiao Tung and Hsin Hua University, Republic of China - 2002

International Bayesian Workshop/Conference, Kolkata, India - 2003

“Markov Chain Monte Carlo Method Applied to cDNA Microarray Analysis”

National Taiwan University - 2001

“A Bayesian Nonparametric Approach to Analyzing Medical Binary Data with
Misclassification Errors”

Fourth Biennial International Conference on Statistics, Probability and Related Areas,
Northern Illinois University, Dekalb, IL-2002

“Microarray Data Analysis” Bioinformatics Workshop

University of Connecticut, Storrs – 2002

“An Improved Collapsed Gibbs Sampler for Dirichlet Process Mixing Model”

International Bayesian Workshop/Conference, Kolkata, India, 2003

“Microarray Data Analysis and Bayesian Networks for Expression Data” Bioinformatics
workshop

University of Connecticut, Storrs - 2003

“Analyzing the Impact of the Development Activity Allocation on Software Team
Productivity” 2003 Quality & Productivity Research Conference in Yorktown Heights,
NY

“Microarray Analysis of Subpopulations of Cells within Differentiating Murine Osteoblast
Cultures” Affymetrix Workshop in Berkeley -2003

“Statistical Methods for Discovering Differentially Expressed Genes in Replicated
Microarray Experiments” International Conference on Analysis of Genomic Data at
Harvard-University 2004

“Zero-inflated Poisson Regression Models”

Fifth Biennial International Conference on Statistics, Probability and Related Areas,
Athens, GA, 2004

“On Statistical Methods for Identifying Differentially Expressed Genes in Replicated
Microarray Experiments”

Northern Michigan University-2005

Albert Einstein Medical School, Yeshiva University -2005

- “Statistical Methods for Analyzing Microarray Data”
Microarray Profiling the Murine Osteoprogenitor Lineage Workshop in Farmington and Storrs.-2006
- “Screening for Differentially Expressed Genes Using Bayes Factors”
International Workshop on Applied Probability, Storrs-2006
- “Comparison of Statistical Methods for Identifying Differentially Expressed Genes”
International Chinese Statistical Association, Applied Statistics Symposium, Storrs, 2006
- “A Bayesian Dynamic Frailty Model for Recurrent Events”
Topic Contributed Session, Joint Statistical Meetings, Seattle, 2006
- “Bayesian Analysis of EST Data with Multiple Libraries and Multiple Types of Tissues”
Mini Symposium on Bayesian Nonparametrics in honor of Professor J. K. Ghosh, 2006
- “Bayesian Pathway Studies Using Microarray Data”
Topic Contributed Session, Joint Statistical Meetings, Salt Lake City, 2007
- “Detecting Differentially Expressed Genes Using Calibrated Bayes Factors”
Tsinghua University, Beijing, China, 2007
- “Combining Classifiers to Select Differentially Expressed Genes for Microarray Data”
Topic Contributed Session, Joint Statistical Meetings, Denver, 2008
- “Improving Marginal Likelihood Estimation for Bayesian Phylogenetic Model Selection”
Pennsylvania State University, State College, PA, 2010
- “Dynamic Frailty and Change Point Models for Recurrent Events Data”
The Seventh Annual Conference on Frontiers in Applied and Computational Mathematics (FACM’10) at New Jersey Institute of Technology, 2010
- “Recent Development in Phylogenetic Studies, Evaluations on Models Accommodating Among-Site Variations” The Eighth ICSA International Conf: Frontiers of Interdisciplinary and Methodological Statistical Research, Guangzhou, China, 2010
- “Gene Expression and Next Generation Sequencing Analysis” JAX-UCONN/BECAT/UHC Workshop, Storrs, CT, 2013.
- “Nonparametric Bayesian Inference with Applications to Biostatistics”
Colloquium at the Department of Biostatistics at the University of Kentucky, 2013.
- "Risk Management, Dynamic Resource Allocation, and Time-Cost Tradeoff in Projects Subject to Uncertainty", 3rd Rutgers Applied Probability Conference: Stochastic Models & Algorithms for Intelligent Business Systems. 2014

- “Posterior Predictive Bayesian Phylogenetic Model Selection”,
Colloquium at the Department of Biostatistics at Columbia University, 2014,
Mathematics Science Department at Worcester Polytechnic Institute, 2014
- “Nonparametric Bayesian Functional Clustering for Time-Course Microarray Data”,
ICSA/Graybill Applied Statistical Conference, 2015, SII Special Invited Session on
Modern Bayesian Statistics II
- “A New Monte Carlo Method for Computing Marginal Likelihoods”,
Invited session, Section of Statistical Computing, Joint Statistical Meetings, Seattle,
2015;
Institute of Statistics, Academia Sinica, Taiwan, 2015
Biostatistics Workshop, Stanford University, 2015
- “Model Selection for Bayesian Survival Models Using Bregman Divergence Measure”,
4th Rutgers Applied Probability Conference: Analytic Methods in Health Care and in
Clinical Trials, 2015
- “Marginal Likelihoods of Phylogenetic Variable Tree Topology Models Using a Posterior
Sample”
The 10th ICSA International Conference on Global Growth of Modern Statistics in the
21st Century, Shanghai, 2016
- “Model Selection for Bayesian Nonparametric Survival Models Using Bregman
Divergence Measure”,
2017 Conference on Lifetime Data Science: Data Science, Precision Medicine and Risk
Analysis with Lifetime Data. Storrs, CT
- “Adaptive Partition Weighted Approach for Estimating Marginal Posterior Density with
Applications”
ICSA 2018 Applied Statistics Symposium, New Brunswick, NJ.
- “A Bayesian Biclustering Approach to Longitudinal Gene Expression Data”
2018 ICSA China Conference, Qingdao, Shandong, China
- “A New Monte Carlo Method for Estimating Marginal Likelihoods”
2019, 4th Eastern Asia Meeting on Bayesian Statistics, Kobe, Japan.

PRESENTATIONS

- "Computation of empirical Bayes estimators via mixtures of Dirichlet processes",
The Institute of Mathematical Statistics (IMS) Meeting, Davis, 1980
- "Bayesian bioassay design",

IMS Meeting, Ann Arbor, 1980

"The admissibility of the empirical distribution function",
The Joint Statistical Meetings, Cincinnati, 1982

"Inference on distribution functions",
The Chesapeake Bay Probability and Statistics Day, 1984

"Estimating a bivariate distribution function with partially missing data",
The Joint Statistical Meetings, Las Vegas, 1985

"Combining the preliminary estimators by convex programming",
The Joint Statistical Meetings, Chicago, 1986

"Inference with missing data",
The First New England Statistics Symposium, 1987

"Linear Bayes estimator of the potency curve in bioassay",
The American Statistical Association Winter Conference, San Antonio, 1988

"Point estimation of the largest location of k negative exponential populations",
The Second New England Statistics Symposium, 1988

"Classical and prediction approaches to estimating distribution functions from survey data",
The Joint Statistical Meetings, New Orleans, 1988

"On the admissibility of the linear estimators of the Poisson mean using linex loss functions",
The Joint Statistical Meetings, Washington, DC, 1989

"Empirical Bayes estimation for the quarterly hog series",
The Joint Statistical Meetings, Anaheim, 1990

"Sampling based approach to computing nonparametric Bayesian estimators with doubly censored data",
23rd Symposium on the Interface between Computing Science and Statistics, 1991

"Nonparametric Bayesian bioassay including ordered polytomous response",
IMS meeting #219, Santa Barbara, 1991

"A sampling based approach to software reliability",
Joint Meetings, San Francisco, 1993

"Bayesian inference for superposition of nonhomogeneous Poisson processes",
The 50th Session of the International Statistical Institute, Beijing, 1995

"Bayesian semiparametric inference for the accelerated failure time model",
Aussois, France, 1995

"Bayesian nonparametric inference for nonhomogeneous Poisson processes",
The IMS Asian and Pacific Regional Meeting Joint with CIPS and CSA 1997

"Bayesian variable selection for regression model",
Workshop on Stochastic Model Building and Variable Selection, Durham, NC, 1997

"Optimal design for quantal bioassay via Monte Carlo methods",
Six Valencia International Meeting on Bayesian Statistics, Spain, 1998.

OTHER PROFESSIONAL ACTIVITIES

Treasurer, New England Statistical Society, Inc. 2017 to present

Program Committee of 2017 Conference on Lifetime Data Science: Data Science, Precision Medicine and Risk Analysis with Lifetime Data.

Student Paper Award Review Committee, New England Statistics Symposium, 29st, and 31st.

Editor, Advances in Statistics, 2014 to September 2016

Treasurer, International Chinese Statistical Association 2010-2012

Member of the CDC Special Emphasis Panel ZDP1 KVA (01) to review 21 applications in response to RFA-DP-20-001 Assessing the Burden of Diabetes By Type in Children, Adolescents and Young Adults (DiCAYA), 2020.

Member of the CDC Special Emphasis Panel of National Center for Chronic Disease Prevention and Health Promotion to review RFA-DP-15-0020301SUPP17: Supplement to Enhance Laboratory and Statistical Support of the Population Registry of Diabetes in Youth, 2017.

Member of the CDC Special Emphasis Panel of National Center for Chronic Disease Prevention and Health Promotion to review RFA-DP-16-005: Study to assess the incidence of Type 1 Diabetes in Young Adults, 2016.

Member of CDC Special Emphasis Panel: Health Promotion and Disease Prevention Research Centers: Special Interest Project Competitive Supplements (SIPS) (EXISTING) - PANEL D, 2011.

Member of CDC Special Emphasis Panel: Knowledge Synthesis Center for Evaluating Genomic Application in Practice and Prevention, 2010

NIH Special Review: Competing Revisions Healthcare Delivery and Methodologies Integrated Review Group, 2009

Symposium Treasurer, International Chinese Statistical Association 2007-2009

Statistics Review Panel, NSF, 2007-2008.

Nominating Committee for President and Councils of IMS, 2005-2006

Treasurer and Registrar, Fund Raising Committee and Local Organizing Committee for ICSA Applied Statistics Symposium, 2005-2006

Associate Editor for the Journal of the American Statistical Association, 2002-2005.

Study Section Member; Social Sciences, Nursing, Epidemiology and Methods 5 (SNEM-5) Integrated Review Group, Center for Scientific Review, NIH, 2001-2003.

Study Section Member; Biostatistical Methods and Research Design, Health of the Population Integrated Review Group, Center for Scientific Review, NIH, 2003-2004.

Member (Chair, 2002) of the Awards Committee of the International Chinese Statistical Association, 2000-2002.

Secretary and Treasurer for the Section of Bayesian Statistics of the American Statistical Association 1998-1999.

Associate Editor for Naval Research Logistics, 1996- 2003.

Adjunct Associate Editor for the Annals of Statistics, 1992-1995.

Representative at Large for Caucus for Women in Statistics, 1990-1991.

Assistant Secretary of the Institute of Mathematical Statistics Eastern Regional Meeting, 1985.

Organized special topic contributed paper sessions for the Joint Statistical Meetings:

On Remote Sensing, Toronto, 1994;

On Bayesian Methods for Financial Models and Discrete Choice Models, Indianapolis, 2000;

On Bayesian Methods for Survival Analysis and Software Reliability, Toronto, 2004.

On Recent Advances in Event Studies Including Recurrent Events, Minneapolis, 2005.

On Bayesian Bioinformatics, Seattle, 2006.

On Bayesian Bioinformatics and Bayesian Biostatistics, 2008.

On Recent Advances in Genomics, San Diego, 2012

Organized invited speaker sessions for the Institute for Operational Research and the Management Science Meetings:

On Bayesian Software Reliability, Washington, D. C. 1996;

On Bayesian Methods for Change-point Problems, Philadelphia, 1999.

Organized invited paper sessions for the Applied Statistics Symposium of the International Chinese Statistical Association:

On Nonparametric Bayesian Statistics, Chicago, 2001

On Bioinformatics, Storrs, 2006

On Recent Advances in Genomics, Boston, 2012

On Recent Advances in Genomics, Washington D.C., 2013

On Recent Advances in Genomics, Colorado, 2015

Organized invited paper sessions for the 10th International Chinese Statistical Association International Conference:

On Novel Approaches to Genomics and Computational Molecular Evolution, Shanghai, 2016

Organized invited paper session for the New England Statistics Symposium

On Advances in Molecular Evolution and Statistics Genetics, 2015.

Organized invited paper session on Bioinformatics for the International Workshop on Applied Probability, Storrs, 2006.

Referee for Annals of Statistics, Biometrika, Biostatistics, BMC Medical Research Methodology, Canadian Journal of Statistics, Cancer Informatics, Communications in Statistics-Theory and Methods, Communications for Statistical Applications and Methods, Computer Journal, Entropy, IEEE Transactions on Reliability, Journal of American Statistical Association, Journal of Applied Statistics, Journal of Royal Statistical Society (Series B), Journal of Multivariate Analysis, Journal of Statistical Planning and Inference, Journal of Statistical Computation and Simulation, Journal of Official Statistics, Journal Research, Lifetime Data Analysis, Medical and Pediatric Oncology, Metrika, Naval Research Logistics, Pakistan Journal of Statistics, PLOS One, Sankhya, Scandinavian Journal of Statistics, SIAM Review, Statistical Decision Theory and Related Topics III, Statistical Papers, Statistical Sinica, Statistics and Probability Letters, Statistics, Statistics in Biosciences, Statistics in Medicine, Systematic Biology, and Technometrics.

Reviewer for proposals submitted to NSF, Air Force Office of Scientific Research, and research agencies of several universities.

Activities at the University of Connecticut:

Supervised Ph.D. Students:

- Tae Yang (1994), "Computational Approach to Bayesian Inference for Software Reliability." Professor, Mongji University, South Korea.
- Hui-May Chu (1998), "Computational Approach to Bayesian Inference for Risk Assessment." Pharmacometrician / Biostatistician, Vertex Pharmaceuticals Incorporated.
- Zhen Chen (2001), "On Modeling Discrete Choice Data." Investigator, Div. Epidemiology, Statistics and Prevention Research, NICHD, NIH.
- Jun Ying (2002), "Some Applications of Hierarchical Bayesian Approaches to

Longitudinal and Time Series Data.” Associate Professor, Department of Environmental Health, University of Cincinnati.

- Changhong Song (2006), “Analyzing Longitudinal Data Using Random Effects Models.” Mathematical Statistician, FDA Center for Devices and Radiological Health.
- Fang Yu (2007), “Bayesian Methods for High-Throughput Gene Expression Data in Bioinformatics.” Associate Professor, Biostatistics Division, University of Nebraska Medical Center.
- Wangang Xie (2008) (joint advising with Ming Hui Chen) “Bayesian Phylogenetic Model Selection and Applications.” Biostatistician, Abbott Labs, Chicago, IL.
- Yifang Zhao (2009) “Contributions to Microarray Data Analysis.” Statistical Consultant, Austin, Texas.
- Ziwen Wei (2012) “Bayesian Methodologies for Time-Course Gene Expression Data and Clinical Trial Data.” Associate Principal Scientist, Merck.
- Rui Wu (2012), (joint advising with Ming Hui Chen), “Theory and Methods for Estimating Normalizing Constants and Posterior Marginal Densities Based on the Inflated Density Ratio with Applications.” Biostatistician, Novartis.
- Patrick Harrington (2015), “Classification and Multiple Hypothesis Testing in Microarray and RNA –Seq Experiments.” Genomic Health Inc.
- Yu-Bo Wang (2016), (joint advising with Ming-Hui Chen), “Adaptive Partition Weighted Monte Carlo Estimation.” Postdoc at NIH.
- Wei Fu (2016) “Predicting Ultimate Targets with Time-Dependent Predictors” Vice President, MAPFRE Insurance.
- Daoyuan Shi (2017) (joint advising with Ming-Hui Chen), “Statistical Methods for Information Assessment and Data Compatibility with Applications” Vertex

Committees served in the University:

Informatics Education Committee(2010), Stem Cell Institute (2007-2013), Bioinformatics and Biocomputing Institute (2002-present), Provost’s Commission on the Status of Women (2007-2013), ITA Program Advisory Board, Graduate Faculty Council to represent the Mathematics and Statistics constituency, Software Internet Group, College of Liberal Arts Courses and Curriculum, Coordinator for Honors Seminars in Physical Sciences for Distinguished High School Students; served as Advisor, College of Liberal Arts and Sciences Academic Advising Center; Reviewer for the Research Excellent Program of the Office of the Vice President for Research (2015 and 2018). Committees in the Department: served as Department Representative on Parents Day. Director of Graduate Studies, 2002-2008, Biostatistics Program Development Committee (chair, 2009-2013), Professional Master Program in Biostatistics (chair, Spring, 2014), Department head search committee (chair, 2011, 2016), Graduate Admissions, Search, Computer, Exam, Promotion, Tenure and Reappointment, Safety, Social, Courses and Curriculum and Library and Technical Report, Strategic Planning, Program Review, Graduate Course Curriculum, Faculty Search (chair), Graduate Students and Distinguished Alumni Awards (Chair), Interim director for undergraduate program (spring 2017), Undergraduate Faculty Academic Advisor (fall 2019-present).

PROFESSIONAL SOCIETIES

American Statistical Association

Institute of Mathematical Statistics
International Chinese Statistical Association
International Society for Bayesian Analysis
International Statistical Institute
American Association for the Advancement of Science
New England Statistical Society