Michael R. Kosorok
CURRICULUM VITAE

OFFICE ADDRESS:
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EDUCATION:

1988	Brigham Young University, Provo, Utah, B.M. Music Composition, Magna cum laude
1988	Brigham Young University, Provo, Utah, M.S. Statistics
1991	University of Washington, Seattle, Washington, M.S. Biostatistics
1991	University of Washington, Seattle, Washington, Ph.D. Biostatistics; Dissertation: A variance reduction method for combining multivariate failure times in order to increase power in clinical trials.
1999	University of Wisconsin, Madison, Wisconsin, M.M. Music Composition

PROFESSIONAL EXPERIENCE:

1992	Senior Fellow, Department of Biostatistics, University of Washington, Seattle, Washington
1992-1998	Assistant Professor, Departments of Statistics and Biostatistics, University of Wisconsin, Madison, Wisconsin (UW-Madison)
1992-1997	Biostatistician, General Clinical Research Center, UW-Madison
1992-2006	Member, University of Wisconsin Comprehensive Cancer Center, UW-Madison
1993-1998	Affiliate Assistant Professor, Department of Pediatrics, UW-Madison
1998-2003	Associate Professor, Departments of Statistics and Biostatistics & Medical Informatics, UW-Madison
1998-2003	Affiliate Associate Professor, Department of Pediatrics, UW-Madison
2003-2006	Professor, Departments of Statistics and Biostatistics & Medical Informatics, UW-Madison
2003-2013	Affiliate Professor, Department of Pediatrics, UW-Madison
2006-present	Professor, Department of Biostatistics, University of North Carolina-Chapel Hill (UNC-Chapel Hilll)
2006-2016	Chair, Department of Biostatistics, UNC-Chapel Hill
2007-present	Professor, Department of Statistics and Operations Research, UNC-Chapel Hill
2008-present	Research Fellow, Cecil B. Sheps Center for Health Services Research, UNC-Chapel Hill
2008-present	Director, NC TraCS (CTSA) Biostatistics Core, UNC-Chapel Hill
2009-present	Member, Lineberger Comprehensive Cancer Center, UNC-Chapel Hill
2013-present	W. R. Kenan, Jr. Distinguished Professor, Department of Biostatistics
2017-present	Chair, Department of Biostatistics, UNC-Chapel Hill

EDITORIAL ACTIVITIES:

2004-	Associate Editor, *Annals of Statistics*
2011-	Associate Editor, *Journal of the American Statistical Association*, Theory and Methods
2015-	Associate Editor, *Journal of the Royal Statistical Society, Series B*
2005-2013	Associate Editor, *International Journal of Biostatistics*
2007-2009	Associate Editor, *Electronic Journal of Statistics*
2007-2009	Associate Editor, *Probability and Statistics Letters*
2007-2009	Associate Editor, *Statistics Surveys*

DATA SAFETY MONITORING BOARDS:

1999-2006	U.S. Cystic Fibrosis Foundation, Data Safety Monitoring Board
2001-2006	U.S. National Institute of Child Health and Human Development, Chair, Intramural Data Safety Monitoring Committee (DSMC)
2003-2009	University of Wisconsin Postpartum Depression Treatment Study, Chair, DSMC
2004-2005	GlaxoSmithKline Study CKA20001, DSMC

NATIONAL AND INTERNATIONAL COMMITTEES (non-DSMC):

1997-2002	U.S. Cystic Fibrosis Foundation, Clinical Research Committee
2002	Institute of Mathematical Statistics, Program Chair, WNAR/IMS Joint Statistical Meeting, Los Angeles, California, June 23-26.
2006	Institute of Mathematical Statistics, Program Co-Chair (with Jason P. Fine), ENAR/IMS Joint Statistical Meeting, New Orleans, Louisiana, March 19-22.
2008	Special Committee for Promotion (for Dr. F. Vonta), University of Cyprus, Cyprus, May 12.
2008-present	Member, Board of Trustees, National Institute of Statistical Sciences.
2009	Institute of Mathematical Statistics, Program Co-Chair (with Xiaotong Shen), Joint Statistical Meeting, Washington, D.C., August 1-6, 2009.
2011-2017	BMRD Study Section, National Institutes of Health
2015	Steering Committee Member for the SAMSI Innovations Lab on Interdisciplinary Approaches to Biomedical Data Science Challenges, July 20-24, 2015.
2016	International Scientific Advisory Committee for the Medical Research Council Biostatistics Unit, Cambridge University, February 17-18, 2016.
2016	Planning Committee Member, Discussant, and Participant in Workshop on "Refining the Concept of Scientific Inference When Working with Big Data", National Academies of Sciences, Engineering, and Medicine, Washington, D.C., June 8-9, 2016.
2016-2019	COPSS Awards Committee
2018	Society for Epidemiologic Research, Session Co-Organize (with Daniel J. Westreich), Baltimore, MD, June 19-22

PROFESSIONAL MEMBERSHIPS:

American Association for the Advancement of Science
American Statistical Association
Institute of Mathematical Statistics
International Biometric Society
International Chinese Statistical Association
International Statistical Institute
Royal Statistical Society

ACCREDITATION:

2011-present	Accredited Professional Statistician™ (American Statistical Association), PStat® (ASA)

AWARDS:

1987	National Collegiate Mathematics Award
1987-88	Composer in Residence for the Brigham Young University Percussion Ensemble
1988	Rothamsted Research Award in Statistics, Brigham Young University
1990	Donovan J. Thompson Outstanding Student in Biostatistics, University of Washington
1997	National Cancer Institute FIRST Award
2004	Honored Alumni, College of Physical and Mathematical Sciences, Brigham Young University
2006	Fellow, American Statistical Association
2007	Fellow, Institute of Mathematical Statistics
2007	Inducted into Delta Omega, the Honorary Public Health Society
2010	Yakovlev Colloquium Speaker, University of Rochester, Department of Biostatistics and Computational Biology
2011	Third Place in the American Statistical Association Biopharmaceutical Section Poster Award Competition for "Reinforcement Learning Strategies for Lung Cancer Clinical Trials"
2012	2011 International Biometrics Society Best Paper in Biometrics Award for "Detecting disease outbreaks using local spatiotemporal methods"
2015	Myra Samuels Memorial Lecturer, Purdue University, Department of Statistics
2015	Institute of Mathematical Statistics Medallion Lecturer
2016	Distinguished Alumni Lecturer, University of Washington, Department of Biostatistics
2016	Plenary Speaker, Conference on Statistical Learning and Data Science, Chapel Hill, NC
2016	Distinguished Lecturer, IMS Asia Pacific Rim Meeting, Hong Kong
2016	Conference (Plenary) Speaker, SINAPE, Porto Alegre, Brazil
2016	Elected Member, International Statistical Institute
2016	Fellow, American Association for the Advancement of Science
2018	Keynote Speaker, Conference on Statistics and Health (Personalized Medicine and Big Data), Institut de Mathématiques de Tououse, Toulouse, France, January, 2018.

RESEARCH INTERESTS:

Biostatistics, Data Science, Machine Learning, Precision Medicine.

PEER REVIEWED PUBLICATIONS:

1. Tolley HD and Kosorok MR: An empirical method of comparing risks using stochastic dominance. *Transactions of the Society of Actuaries* 41:507-545, 1989.
2. Swenson PD, Riess JT, Kosorok MR and Oberle MW: HBsAg subtyping with monoclonal antibodies in Southeast Asian refugees entering the United States. In: *Viral Hepatitis and Liver Disease*, Ed. Hollinger FB, Lemon SM, and Margolis HS, Pages 199-202. Baltimore: Williams and Wilkins, 1991.
3. Kosorok MR, Omenn GS, Diehr P, Koepsell TD, and Patrick DL: Conditions associated with restricted activity days among older adults. *American Journal of Public Health* 82:1263-1267, 1992.
4. Kosorok MR and Fleming TR: Using surrogate failure time data to increase cost effectiveness in clinical trials. *Biometrika* 80:823-833, 1993.
5. Baken LA, Koutsky LA, Kuypers J, Kosorok MR, Lee SK, Kiviat NB, Holmes KK: Genital human papillomavirus infection among male and female sexual partners: Prevalence and type-specific concordance. *Journal of Infectious Diseases* 171:429-432, 1995.
6. Kosorok MR, Chao W-H: The analysis of longitudinal ordinal response data in continuous time. *Journal of the American Statistical Association* 91:807-817, 1996.
7. Kosorok MR, Wei W-H, Farrell PM: The incidence of cystic fibrosis. *Statistics in Medicine* 15:449-462, 1996.
8. van Egmond AWA, Kosorok MR, Koscik RE, Laxova A, Farrell PM: Effect of linoleic acid intake on growth of infants with cystic fibrosis. *American Journal of Clinical Nutrition* 63:746-752, 1996.
9. Farrell PM, Kosorok MR, Laxova A, Shen G, Koscik RE, Bruns T, Splaingard M, Mischler EH, and the Wisconsin Cystic Fibrosis Neonatal Screening Group: Nutritional benefits of newborn screening for cystic fibrosis. *New England Journal of Medicine* 337:963-969, 1997.
10. Farrell PM, Shen G, Splaingard M, Colby CE, Laxova A, Kosorok MR, Rock MJ, Mischler EH: Acquisition of *Pseudomonas aeruginosa* in children with cystic fibrosis. *Pediatrics*, 100(5): URL: http://www.pediatrics.org/cgi/content/full/100/5/e2, 1997.
11. Gregg RG, Simantel A, Farrell PM, Koscik R, Kosorok MR, Laxova A, Laessig R, Hoffman G, Hassemer D, Mischler EH, Splaingard M: Newborn screening for cystic fibrosis in Wisconsin: Comparison of biochemical and molecular methods. *Pediatrics* 99:819-824, 1997.
12. Pursley JR, Kosorok MR, Wiltbank MC: Reproductive management of lactating dairy cows using synchronization of ovulation. *Journal of Dairy Science* 80:301-306, 1997.
13. Kosorok MR, Jalaluddin M, Farrell PM, Shen G, Colby CE, Laxova A, Rock MJ, Splaingard M: Comprehensive analysis of risk factors for acquisition of *Pseudomonas aeruginosa* in young children with cystic fibrosis. *Pediatric Pulmonology* 26:81-88, 1998.
14. Lai H-C, Kosorok MR, Sondel SA, Chen S-T, FitzSimmons SC, Green CG, Shen G, Walker S, Farrell PM: Growth status in children with cystic fibrosis based on the national Cystic Fibrosis Patient Registry data: Evaluation of various criteria used to identify malnutrition. *Journal of Pediatrics* 132:478-485, 1998.
15. Pan W, Chappell R, Kosorok MR: On consistency of the nonparametric MLE of survival for left truncated and interval censored data. *Statistics and Probability Letters* 38:49-57, 1998.
16. Douglas JA, Kosorok MR, Chewning BA: A latent variable model for multivariate failure time data with psychometrical applications. *Psychometrika* 64: 69-82, 1999.
17. Gourley GR, Kreamer B, Cohnen M, Kosorok MR: Neonatal jaundice and diet. *Archives of Pediatrics & Adolescent Medicine* 153:184-188, 1999.
18. Johnson CA, Wakeen M, Taylor CA, Zimmerman SW, Bhattacharya A, Kosorok MR: Comparison of intraperitoneal and subcutaneous epoetin in peritoneal dialysis patients. *Peritoneal Dialysis International* 19:578-582, 1999.
19. Kosorok MR: Two-sample quantile tests under general conditions. *Biometrika* 86:909-921, 1999.
20. Kosorok MR, Lin C-Y: The versatility of function-indexed weighted log-rank statistics. *Journal of the American Statistical Association* 94:320-332, 1999.
21. Kosorok MR, Qu RP: Exact simultaneous confidence bands for a collection of univariate polynomials in regression analysis. *Statistics in Medicine* 18:613-620, 1999.
22. Lai H-C, Corey M, FitzSimmons S, Kosorok MR, Farrell PM: Comparison of growth status in patients with cystic fibrosis between United States and Canada. *American Journal of Clinical Nutrition* 69:531-538, 1999.
23. Lin C-Y, Kosorok MR: A general class of function-indexed nonparametric tests for survival analysis. *Annals of Statistics* 27:1722-1744, 1999.
24. Pridham K, Kosorok MR, Greer F, Carey P, Kayata S, Sondel S: The effects of prescribed versus ad libitum feedings and formula caloric density on growing premature infants. *Nursing Research* 48:86-93, 1999.

25. Taylor CA, Kosorok MR, Zimmerman SW, Johnson CA: Pharmacokinetics of intraperitoneal epoetin alpha in patients on peritoneal dialysis using 8-hour "dry dwell" dosing technique. *American Journal of Kidney Diseases* 34:657-662, 1999.
26. Jalaluddin M, Kosorok MR: An algorithm for robust inference for the Cox model with frailties. *Journal of Computational and Graphical Statistics* 9:642-652, 2000. (Jalaluddin was one of four winners of the ASA Statistical Computing Section Student Paper Competition.)
27. Karofsky PA, Zeng L, Kosorok MR: The relationship between adolescent-parental communication and the initiation of first intercourse by adolescents. *Journal of Adolescent Health* 28:41-45, 2000.
28. Koscik RE, Kosorok MR, Farrell PM, Collins J, Peters ME, Laxova A, Green CG, Zeng L, Rusakow LS, Hardie RC, Campbell PW, Gurney JW: The Wisconsin Cystic Fibrosis Chest Radiograph Scoring System: Validation and standardization for application to longitudinal studies. *Pediatric Pulmonology* 29:457-467, 2000.
29. Kosorok MR: Monte Carlo error estimation for multivariate Markov chains. *Statistics and Probability Letters* 46:85-93, 2000.
30. Lai H-C, FitzSimmons SC, Allen DB, Kosorok MR, Rosenstein BJ, Campbell PW, Farrell PM: Persistent growth impairment in children with cystic fibrosis following treatment with alternate-day prednisone. *New England Journal of Medicine* 342:852-859, 2000.
31. Lai H-C, Kosorok MR, Laxova A, Davis LA, FitzSimmons SC, Farrell PM: Nutritional status of patients with cystic fibrosis with meconium ileus: A comparison with patients without meconium ileus and diagnosed early through neonatal screening. *Pediatrics* 105:53-61, 2000.
32. Wei W-H, Kosorok MR: Masking unmasked in the proportional hazards model. *Biometrics* 56:991-995, 2000.
33. Farrell PM, Kosorok MR, Rock MJ, Laxova A, Zeng L, Lai H-C, Hoffman G, Laessig RH, Splaingard ML, and the Wisconsin Cystic Fibrosis Neonatal Screening Study Group: Early diagnosis of cystic fibrosis through neonatal screening prevents severe malnutrition and improves long-term growth. *Pediatrics* 107:1-13, 2001.
34. Kosorok MR, Zeng L, West SEH, Rock MJ, Splaingard ML, Laxova A, Green CG, Collins J, Farrell PM: Acceleration of lung disease in children with cystic fibrosis after *Pseudomonas aeruginosa* acquisition. *Pediatric Pulmonology* 32:277-287, 2001.
35. Pridham K, Kosorok MR, Greer F, Kayata S, Bhattacharya A, Grunwald P: Comparison of caloric intake and weight outcomes of an ad lib feeding regimen for preterm infants in two nurseries. *Journal of Advanced Nursing* 35:751-759, 2001.
36. Gern JE, Martin MS, Anklam KA, Shen K, Roberg KA, Carlson-Dakes KT, Adler K, Gilbertson-White S, Hamilton R, Shult PA, Kirk CJ, DaSilva DF, Sund SA, Kosorok MR, Lemanske RF Jr.: Relationships among specific viral pathogens, virus-induced interleukin-8, and respiratory symptoms in infancy. *Pediatric Allergy and Immunology* 13:386-393, 2002.
37. Gilbert PB, Wei LJ, Kosorok MR, Clemens JD: Simultaneous inferences on the contrast of two hazard functions with censored observations. *Biometrics* 58:773-780, 2002.
38. Kosorok MR: On global consistency of a bivariate survival estimator under univariate censoring. *Statistics and Probability Letters* 56:439-446, 2002.
39. Kosorok MR, Fine JP, Jiang H, Chappell RJ: Asymptotic theory for the gamma frailty model with dependent censoring. *Annals of the Institute of Statistical Mathematics* 54:476-499, 2002.
40. Lai H-C, Kosorok MR, Laxova A, Makholm M, Farrell PM: Delayed diagnosis in females with cystric fibrosis. *American Journal of Epidemiology* 156:165-173, 2002.
41. West SHE, Zeng L, Lee BL, Kosorok MR, Laxova A, Rock MJ, Splaingard MJ, Farrell PM: Respiratory infections with *Pseudomonas aeruginosa* in children with cystic fibrosis: Early detection by serology and assessment of risk factors. *Journal of the American Medical Association* 287:2968-2972, 2002.
42. Farrell PM, Li Z, Kosorok MR, Laxova A, Green CG, Collins J, Lai H-C, Makholm LM, Rock MJ, Splaingard ML: Longitudinal evaluation of bronchopulmonary disease in children with cystic fibrosis. *Pediatric Pulmonology* 36:230-240, 2003.
43. Farrell PM, Li Z, Kosorok MR, Laxova A, Green CG, Collins J, Lai H-C, Rock MJ, Splaingard ML: Bronchopulmonary disease in children with cystic fibrosis after early or delayed diagnosis. *American Journal of Respiratory and Critical Care Medicine* 168:1100-1108, 2003.
44. Kosorok MR: Bootstraps of independent but not identically distributed stochastic processes. *Journal of Multivariate Analysis* 84:299-318, 2003.
45. Potegal M, Kosorok MR, Davidson RJ: Temper tantrums in young children: 2. Tantrum duration and temporal organization. *Journal of Developmental and Behavioral Pediatrics* 24:148-154, 2003.
46. Cook TD, Kosorok MR: Analysis of time-to-event data with incomplete event adjudication. *Journal of the American Statistical Association* 99:1140-1152, 2004.
47. Fine JP, Yan J, Kosorok MR: Temporal process regression. *Biometrika* 91:683-703, 2004.
48. Gangnon RE, Kosorok MR: Weighted log-rank statistics and sample size formula for clustered survival data. *Biometrika* 91:263-275, 2004.

49. Koscik RL, Farrell PM, Kosorok MR, Zaremba KM, Laxova A, Lai H-C, Douglas JA, Rock MJ, Splaingard ML: Cognitive function of children with cystic fibrosis: Deleterious effect of early malnutrition. *Pediatrics* 113:1549-1558, 2004.
50. Kosorok MR, Lee BL, Fine JP: Robust inference for univariate proportional hazards frailty regression models. *Annals of Statistics* 32:1448-1491, 2004.
51. Kosorok MR, Shi Y, DeMets DL: Design and analysis of group sequential clinical trials with multiple primary endpoints. *Biometrics* 60:134-145, 2004.
52. Lai H-C, Cheng Y, Cho H, Kosorok MR, Farrell PM: Relationship between initial disease presentation, lung disease outcomes and survival in patients with cystic fibrosis. *American Journal of Epidemiology* 159:537-546, 2004.
53. Li Z, Lai H-C, Kosorok MR, Laxova A, Rock MJ, Splaingard ML, Farrell PM: Longitudinal pulmonary status of cystic fibrosis children with meconimum ileus. *Pediatric Pulmonology* 38:277-284, 2004.
54. Corech R, Rao A, Laxova A, Moss J, Rock MJ, Li Z, Kosorok MR, Splaingard ML, Farrell PM, Barbieri JT: Early immune response to the type-III system of *Pseudomonas aeruginosa* in children with cystic fibrosis. *Journal of Clinical Microbiology* 43:3956-3962, 2005.
55. Dixon JR, Kosorok MR, Lee BL: Functional inference in semiparametric models using the piggyback bootstrap. *Annals of the Institute of Statistical Mathematics* 57:255-277, 2005.
56. Eng KH, Kosorok MR: A sample size formula for the supremum log-rank statistic. *Biometrics* 61:86-91, 2005.
57. Farrell PM, Lai H-C, Li Z, Kosorok MR, Laxova A, Green CG, Collins J, Hoffman G, Laessig R, Rock MJ, Splaingard ML: Evidence on improved outcomes with early diagnosis of cystic fibrosis through neonatal screening: Enough is enough! *Journal of Pediatrics* 147:S30-S35, 2005.
58. Gourley GR, Li Z, Kreamer BL, Kosorok MR: A controlled, randomized, double-blind trial of prophylaxis against jaundice in breastfed newborns. *Pediatrics* 116:392-399, 2005.
59. Jiang H, Fine JP, Kosorok MR, Chappell RJ: Pseudo self-consistent estimation of a copula model with informative censoring. *Scandinavian Journal of Statistics* 32:1-20, 2005.
60. Koscik RL, Lai H-C, Laxova A, Zaremba KM, Kosorok MR, Douglas JA, Rock MJ, Splaingard ML, Farrell PM: Preventing early, prolonged vitamin E deficiency: An opportunity for better cognitive outcomes via early diagnosis through neonatal screening. *Journal of Pediatrics* 147:S51-S56, 2005.
61. Kosorok MR, Ma S: Comment on "Semilinear high-dimensional model for normalization of microarray data: a theoretical analysis and partial consistency" by J. Fan, H. Peng, T. Huang. *Journal of the American Statistical Association* 100:805-807, 2005.
62. Lee BL, Kosorok MR, Fine JP: The profile sampler. *Journal of the American Statistical Association* 100:960-969, 2005.
63. Li Z, Kosorok MR, Farrell PM, Laxova A, West SEH, Green CG, Collins J, Rock MJ, Splaingard ML: Longitudinal development of *Pseudomonas aeruginosa* infection and lung disease progression in children with cystic fibrosis. *Journal of the American Medical Association* 293:581-588, 2005.
64. Ma S, Kosorok MR: Penalized log-likelihood estimation for partly linear transformation models with current status data. *Annals of Statistics* 33:2256-2290, 2005.
65. Ma S, Kosorok MR: Robust semiparametric M-estimation and the weighted bootstrap. *Journal of Multivariate Analysis* 96:190-217, 2005.
66. Braun AT, Farrell PM, Ferec C, Audrezet MP, Laxova A, Li Z, Kosorok MR, Gershan WM: Cystic fibrosis mutations and genotype-pulmonary phenotype analysis. *Journal of Cystic Fibrosis* 5:33-41, 2006.
67. Brody AS, Kosorok MR, Li Z, Broderick LS, Foster JL, Laxova A, Bandla H, Farrell PM: Reproducibility of a scoring system for computerized tomography scanning in cystic fibrosis. *Journal of Thoracic Imaging* 21:14-21, 2006.
68. Kosorok MR, Gangnon RE: Resolving the tail instability in weighted log-rank statistics for clustered survival data. *Statistics and Probability Letters* 76:304-309, 2006.
69. Ma S, Kosorok MR: Adaptive penalized M-estimation with current status data. *Annals of the Institute of Statistical Mathematics* 58:511-526, 2006.
70. Ma S, Kosorok MR, Fine JP: Additive risk models for survival data with high dimensional covariates. *Biometrics* 62:202-210, 2006.
71. Ma S, Kosorok MR, Huang J, Xie H, Manzella L, Soares MB: Robust semiparametric cDNA microarray normalization and significance analysis. *Biometrics* 62:555-561, 2006.
72. Cheng Y, Fine JP, Kosorok MR. Nonparametric analysis of multivariate competing risks data. *Journal of the American Statistical Association*, 102:1407-1415, 2007.
73. Kosorok MR: Discussion on "Maximum likelihood estimation in semiparametric regression models with censored data" by D. Zeng, D.Y. Lin. *Journal of the Royal Statistical Society, Series B* 69:551-552, 2007.
74. Kosorok MR, Fine JP: Comment on "Implementation of estimating-function based inference procedures with Markov chain Monte Carlo samplers" by L. Tian, J. S. Liu, L. J. Wei. *Journal of the American Statistical Association* 102:896-897, 2007.
75. Kosorok MR, Ma S: Marginal asymptotics for the "large p, small n" paradigm: with applications to microarray data. *Annals of Statistics* 35:1456-1486, 2007.

76. Kosorok MR, Song R: Inference under right censoring for transformation models with a change-point based on a covariate threshold. *Annals of Statistics*, 35:957-989, 2007.
77. Cheng G, Kosorok MR: Higher order semiparametric frequentist inference with the profile sampler. *Annals of Statistics* 36:1786-1818, 2008.
78. Cheng G, Kosorok MR. General frequentist properties of the posterior profile distribution. *Annals of Statistics* 36:1819-1853, 2008.
79. Kosorok MR. Bootstrapping the Grenander estimator. In: *Beyond Parametrics in Interdisciplinary Research: Festschrift in Honor of Professor Pranab K. Sen*. Eds. N. Balakrishnan, E.A. Peña, M.J. Silvapulle. Collections, Volume 1. Institute of Mathematical Statistics: Beachwood, OH. Pages 282-292, 2008.
80. Kosorok MR. Semiparametric maximum likelihood inference in survival analysis. In: *Statistical Advances in the Biomedical Sciences: Clinical Trials, Epidemiology, Survival Analysis, and Bioinformatics*. Eds. A. Biswas, S. Datta, J. P. Fine, M. R. Segal. Wiley: New York. Pages 159-175, 2008.
81. Song R, Cook TD, Kosorok MR: What we want versus what we can get: A closer look at failure time endpoints for cardiovascular studies. *Journal of Biopharmaceutical Statistics* 18:370-381, 2008.
82. Song R, Kosorok MR, Cai J: Robust covariate-adjusted log-rank statistics and corresponding sample size formulas for recurrent events data. *Biometrics* 64:741-750, 2008.
83. Anand IS, Carson P, Galle E, Song R, Boehmer J, Ghali J, Jaski B, Lindenfeld J, O'Connor C, Steniberg J, Leigh J, Yong P, Kosorok MR, Feldman AM, DeMets D, Bristow M. Cardiac resynchronization therapy reduces the risk of hospitalizations in patients with advanced heart failure: results from the COMPANION trial. *Circulation* 119:3093-3100, 2009.
84. Cheng Y, Fine JP, Kosorok MR: Nonparametric association analysis of exchangeable clustered competing risks data. *Biometrics* 65:385-393, 2009.
85. Cheng G, Kosorok MR: The penalized profile sampler. *Journal of Multivariate Analysis*, 100:345-362, 2009.
86. Farrell PM, Collins J, Broderick LS, Rock MJ, Li Z, Kosorok MR, Laxova A, Gershan WM, Brody AS: Association between mucoid *Pseudomonas* infection and bronchiectasis in children with cystic fibrosis. *Radiology* 252:534-543, 2009.
87. Kosorok MR: What's so special about semiparametric methods? (with discussion and rejoinder) *Sankhya Series A* 71-A:331-371.
88. Kosorok MR: Discussion of: Brownian distance covariance. *Annals of Applied Statistics* 4:1270-1278, 2009.
89. Ma S, Kosorok MR: Identification of differential gene pathways with principal component analysis. *Bioinformatics* 25:882-889, 2009.
90. Song R, Kosorok MR, Fine JP: On asymptotically optimal tests under loss of identifiability in semiparametric models. *Annals of Statistics* 37:2409-2444, 2009.
91. Song R, Zhou H, Kosorok MR: On semiparametric efficient inference for two-stage outcome-dependent-sampling with a continuous outcome. *Biometrika* 96:221-228, 2009.
92. Zhao YF, Kosorok MR, Zeng D: Reinforcement learning design for cancer clinical trials. *Statistics in Medicine* 28:3294-3315, 2009.
93. Han X, Li Y, Huang J, Zhang Y, Holford T, Lan Q, Rothman N, Zheng T, Kosorok MR, Ma S: Identification of predictive pathways for non-Hodgkin lymphoma prognosis. *Cancer Informatics* 9:281-292, 2010.
94. Ma S, Kosorok MR: Detection of gene pathways with predictive power for breast cancer prognosis. *BMC Bioinformatics* 11:1, 2010.
95. Cao H, Kosorok MR: Simultaneous critical values for t-tests in very high dimensions. *Bernoulli* 17:347-394, 2011.
96. Goldberg Y, Kosorok MR: Comment on "Adaptive confidence intervals for the test error in classification" by E. B. Labor and S. A. Murphy. *Journal of the American Statistical Association* 106:920-924, 2011.
97. Ma S, Kosorok MR, Huang J, Da Y: Incorporating higher-order representative features improves prediction in network-based cancer prognosis analysis. *BMC Medical Genomics* 4:5, 2011.
98. Nadkarni N, Zhao YQ, Kosorok MR: Inverse regression estimation for censored data. *Journal of the American Statistical Association* 106:178-190, 2011.
99. Zhao YQ, Zeng D, Herring AH, Ising A, Waller A, Richardson D, Kosorok MR: Detecting disease outbreaks using local spatiotemporal methods. *Biometrics* 67:1508-1517, 2011. (Winner of both the 2011 International Biometrics Society Best Paper in Biometrics Award and the 2010 American Statsitical Association Statistics in Epidemiology Young Investigator Award.)
100. Zhao YF, Zeng D, Socinski MA, Kosorok MR: Reinforcement learning strategies for clinical trials in non-small cell lung cancer. *Biometrics*, 67:1422-1433, 2011. (A poster based on this paper was the Third Place Winner of the 2011 American Statistical Association Biopharmaceutical Section Poster Award Competition.)
101. Carpenter WR, Meyer AM, Abernethy AP, Sturmer T, Kosorok MR: A framework for understanding cancer comparative effectiveness research data needs. Journal of Clinical Epidemiology 65:1150-1158, 2012.
102. Goldberg Y, Kosorok MR: Q-learning with censored data. *Annals of Statistics* 40:529-560, 2012.
103. Goldberg Y, Kosorok MR: An exponential bound for Cox regression. *Statistics and Probability Letters* 82:1267-1272, 2012.

104. Kang C, Zhu H, Wright FA, Zou F, Kosorok MR: The interactive decision committee for chemical toxicity analysis. *Journal of Statistical Research* 46:157-186, 2012.
105. Li Z, Sanders DB, Rock MJ, Kosorok MR, Collins J, Green CG, Brody AS, Farrell PM: Regional differences in the evolution of lung disease in children with cystic fibrosis. *Pediatric Pulmonology* 47:635-640, 2012.
106. Meyer AM, Carpenter WR, Abernethy AP, Sturmer T, Kosorok MR: Data for cancer comparative effectiveness research: Past, present, and future potential. *Cancer* 118:5186-5197, 2012.
107. Tang R, Banerjee M, Kosorok MR: Likelihood based inference for current status data on a grid: A boundary phenomenon and an adaptive inference procedure. *Annals of Statistics* 40:45-72, 2012.
108. Zhao YQ, Zeng D, Rush AJ, Kosorok MR: Estimating individualized treatment rules using outcome weighted learning. *Journal of the American Statistical Association* 107:1106-1118, 2012.
109. Zhu R, Kosorok MR: Recursively imputed survival trees. *Journal of the American Statistical Association* 107:331-340, 2012.
110. Cao H, LaVange, LM, Heyse JF, Mast TC, Kosorok MR: Medical records based post-marketing safety evaluation of rare events with uncertain status. *Journal of Biopharmaceutical Statistics* 23:201-212, 2013.
111. Cao H, Sun W, Kosorok MR: The optimal power puzzle: scrutiny of the monotone likelihood ratio assumption in multiple testing. *Biometrika* 100:495-502, 2013.
112. Chen G, Sullivan PF, Kosorok MR: Biclustering with heterogeneous variance. *Proceedings of the National Academy of Sciences* 110:12253-12258, 2013.
113. Ding K, Kosorok MR, Zeng D: On the local and stratified likelihood approaches in single-index model. *Communications in Mathematics and Statistics* 1:115-132, 2013.
114. Goldberg Y, Song R., Kosorok MR: Adaptive Q-Learning. In: *From Probability to Statistics and Back: High-Dimensional Models and Processes -- A Festschrift in Honor of Jon Wellner*. Eds. M. Banerjee, F. Bunea, J. Huang, V. Koltchinskii, M.H. Maathuis. Collections, Volume 9. Institute of Mathematical Statistics: Beachwood, OH. Pages 150-162, 2013.
115. Monaco JH, Cai J, LaVange LM, Kosorok MR: History of the Department of Biostatistics at the University of North Carolina at Chapel Hill. In: *Strength in Numbers: The Rising of Academic Statistics Departments in the U. S*. Eds Agresti AA, Meng X-L. Springer: New York. Pages 453-468, 2013.
116. Wei S, Kosorok MR: Latent supervised learning. *Journal of the American Statistical Association* 108:957-970, 2013.
117. Goldberg Y, Song R, Zeng D, Kosorok MR: Comment on "Dynamic treatment regimes: technical challenges and applications" by E. B. Laber, D. J. Lizotte, M. Qian, W. E. Pelham, and S. A. Murphy. *Electronic Journal of Statistics* 8:1290-1300, 2014.
118. Ren Z, Davidian M, George SL, Goldberg RM, Wright FA, Tsiatis AA, Kosorok MR: Research methods for clinical trials in personalized medicine: a systematic review. In: *Lost in Translation: Barriers to Incentives for Translational Research in Medical Science*s. Eds. Srivastava R, Maksymowicz W, Lopaczynski W. World Scientific: Singapore. Pages 659-684, 2014.
119. R. Song R, Kosorok MR, Fine JP: Discussion of "Multiscale change point inference" by K. Frick, A. Munk and H. Sieling. *Journal of the Royal Statistical Society, Series B* 76:564, 2014.
120. Zhao YQ, Kosorok MR: Comment on "Combining biomarkers to optimize patient treatment recommendations" by C. Y. Kang, H. Janes, and Y. Huang. *Biometrics* 70:713-716, 2014.
121. Holdsworth La E, Zhu R, Hassmiller Lich K, Ellis AR, Swartz MS, Kosorok MR, Morrissey JP: The effects of state psychiatric hospital waitlist policies on length of stay and time to readmission. *Administration and Policy in Mental Health* 42:332-342, 2015.
122. Song R, Kosorok MR, Zeng D, Zhao YQ, Laber EB, Yuan M: On sparse representation for optimal individualized treatment selection with penalized outcome weighted learning. *Stat* 4:59-68, 2015.
123. Song R, Wang W, Zeng D, Kosorok MR: Penalized Q-learning for dynamic treatment regimes. *Statistica Sinica* 25:901-920.
124. Zhao YQ, Zeng D, Laber EB, Kosorok MR: New statistical learning methods for estimating optimal dynamic treatment regimes. *Journal of the American Statistical Association* 110:583-598, 2015.
125. Zhao YQ, Zeng D, Laber EB, Song R, Yuan M, Kosorok MR: Doubly robust learning for estimating individualized treatment with censored data. *Biometrika* 102:151-168, 2015.
126. Zhu R, Zeng D, Kosorok MR: Reinforcement learning trees. *Journal of the American Statistical Association* 110:1770-1784, 2015.
127. Chen G, Liu Y, Shen D, Kosorok MR: Composite large margin classifiers with latent subclasses for heterogeneous biomedical data. *Statistical Analysis and Data Mining* 9:75-88, 2016.
128. Chen J, Liu Y, Zeng D, Song R, Zhao YQ, Kosorok MR: Comment on "Bayesian nonparametric estimation for dynamic treatment regimes with sequential transition times" by Y. Xu, P. Müller, A. S. Wahed, P. F. Thall. *Journal of the American Statistical Association* 111:942-947.
129. Chen G, Zeng D, Kosorok MR: Personalized dose finding using outcome weighted learning (with discussion and rejoinder). *Journal of the American Statistical Association* 111:1509-1547, 2016.

130. Laber EB, Zhao YQ, Regh T, Davidian M, Tsiatis A, Stanford JB, Zeng D, Song R, Kosorok MR: Using pilot data to size a two-arm randomized trial to find a nearly optimal personalized treatment strategy. *Statistics in Medicine* 35:1245-1256, 2016.
131. Song R, Banerjee B, Kosorok MR: Asymptotics for change-point models under varying degrees of mis-specification. *Annals of Statistics* 44:153-182, 2016.
132. Teran Hidalgo SJ, Lawson MT, Luckett DJ, Chaudhari M, Chen J, Choudhury A, Di Florio A, Jiang X, Nguyen CT, Kosorok MR: A master pipeline for discovery and validation of biomarkers. In: *Machine Learning for Health Informatics: State-of-the-Art and Future Challenge*s. Ed Holzinger A. Springer International Publishing. Pages 259-288, 2016.
133. Cui Y, Zhu R, Kosorok MR: Tree based weighted learning for estimating individualized treatment rules with censored data. *Electronic Journal of Statistics* 11:3927-3953, 2017.
134. Diegidio P, Hermiz S, Hibbard J, Kosorok MR, Hultman CS: Hypertrophic burn scar research: From quantitative assessment to designing clinical sequential multiple assignment randomized trials. *Clinics in Plastic Surgery* 44:917-924, 2017
135. Goldberg Y, Kosorok MR: Support vector regression for right censored data. *Electronic Journal of Statistics* 11:532-569, 2017.
136. Zhang Q, Kosorok MR: Statistical monitoring of clinical trials using Brownian bridges. *International Journal of Statistics and Probability* 6:142-151, 2017.
137. Zhou X, Mayer-Hamblett N, Khan U, Kosorok MR: Residual weighted learning for estimating individualized treatment rules. *Journal of the American Statistical Association* 112:169-187, 2017.
138. Butler EM, Laber EB, Davis SM, Kosorok MR: Incorporating patient preferences into estimation of optimal individualized treatment rules. *Biometrics* 74:18-26, 2018.
139. Chen G, Kosorok MR, Zhou X: Nonconvex Optimization. Wiley StatsRef: Statistics Reference Online. 1–9, 2018.
140. Hibbard JC, Friedstat JS, Davis SM, Edkins RE, Hultman CS, Kosorok MR: LIBERTY: A SMART study in plastic surgery. *Clinical Trials* 15:286-293, 2018.
141. Saiman L, Zhou JJ, Jiang X, Kosorok MR, Muhlebach MS: Surveying cystic fibrosis care centers to assess adoption of infection prevention and control recommendations. *Infection Control and Hospital Epidemiology* 39:647-651, 2018.
142. Teran Hidalgo SJ, Wu MC, Engel SE, Kosorok MR: Goodness-of-fit test for nonparametric regression models: Smoothing spline ANOVA models as example. *Computational Statistics and Data Analysis* 122:135-155, 2018.
143. Bellach A, Kosorok MR, Rüschendorf L, Fine JP: Weighted NPMLE for the subdistribution of a competing risk. *Journal of the American Statistical Association*, In press.
144. Chaudhari M, Kim EH, Withana Gamage PW, McMahan CS, Kosorok MR: Study design with staggered sampling times for evaluating sustained unresponsiveness to peanut sublingual immunotherapy. *Statistics in Medicine*, In press.
145. Chen J, Fu H, He X, Kosorok MR, Liu Y: Estimating individualized treatment rules for ordinal treatments. *Biometrics*, In press.
146. Chen J, Zhang C, Kosorok MR, Liu Y: Double sparsity kernel learning with automatic variable selection and data extraction (with discussion and rejoinder). *Statistics and Its Interface*, In press.
147. Dasgupta D, Goldberg Y, Kosorok MR: Feature elimination in kernel machines in moderately high dimensions. *Annals of Statistics*, In press.
148. Di Florio A, Gordan-Smith K, Forty L, Kosorok MR, Fraser C, Perry A, Bethell A, Craddock N, Jones L, Jones I: Stratification of the risk of bipolar disorder recurrences in pregnancy and postpartum. *British Journal of Psychiatry*, In press.
149. El Naqa I, Kosorok MR, Jin J, Mierzwa M, Ten Haken TR: Prospects and challenges for clinical decision support in the era of big data. *Journal of Clinical Oncology Clinical Cancer Informatics*, In press.
150. Kosorok MR, Laber EB: Precision medicine. *Annual Review of Statistics and Its Application*, In press.
151. Lawson MT, Cho H, Choudhury A, Cui Y, Jiang X, Pokaprakarn T, Kosorok MR: Discussion of Laber at al. "Optimal treatment allocations in space and time for on-line control of an emerging infectious disease." *Journal of the Royal Statistical Society Series C*, In press.
152. Liu Y, Wang Y, Kosorok MR, Zhao Y, Zeng D: Augmented outcome-weighted learning for estimating optimal dynamic treatment regimes. *Statistics in Medicine*, In press.
153. Wei S, Kosorok MR: The change-plane Cox model. *Biometrika,* In press.

BOOKS

Kosorok MR: *Introduction to Empirical Processes and Semiparametric Inference*. Springer: New York, 2008.

Kosorok MR, Moodie EEM: *Adaptive Treatment Strategies in Practice: Planning Trials and Analyzing Data for Personalized Medicine*. ASA-SIAM Series on Statistics and Applied Probability. SIAM, Philadelphia, ASA, Alexandria, VA, 2016.

GRANT SUPPORT:

T32 LM012420 (CA201159 in Year 1), National Library of Medicine: Big Data to Knowledge Training Program (05/01/15-04/30/20). PI : Drs. Michael R. Kosorok (contact PI) and M. Gregory Forest; My Role: Contact Pricipal Investigator.

P01 CA142538, National Cancer Institute: Statistical Methods for Cancer Clinical Trials (04/01/10-03/31/20). PI: Drs. Michael R. Kosorok (contact PI), Marie Davidian, Stephen L. George (04/01/10-03/31/15) and Kouros Owzar (04/01/15-03/31/20); My Role: Contact Principal Investigator, 32-40% effort.

DMS-1407732, National Science Foundation: Support vector machines for censored data (07/01/14-06/30/18). PI: Dr. Michael R. Kosorok (in collaboration with Dr. Yair Goldberg); My Role: Principal Investigator, 5-10% effort.

UL1 TR002489, NIH: North Carolina Translational & Clinical Sciences Institute (NC TraCS) (03/30/18-02/28/23). PI: Dr. John B. Buse; My role: Co-Project Leader, 20% effort.

UL1 TR001111, NIH: North Carolina Translational & Clinical Sciences Institute (NC TraCS) (09/26/13-04/30/18). PI: Dr. Marschall S. Runge; My Role: Director of Biostatistics Service, 20% effort.

UL1 RR025747, NIH National Center for Research Resources: UNC Clinical Translation Science Award (05/19/08-04/30/13). PI: Dr. Marschall S. Runge; My Role: Director of Biostatistics Core, 20% effort.

U24 HL138998. NIH: Data, Modeling, and Coordination for PrecISE Network (09/23/17-06/30/23). PI: Dr. Anastasia Ivanova; My Role: Co-Investigator, 15% effort.

DP3 DK113358. NIH: Accelerating Solutions to Optimize Glycemic Control and Weight Management in Young Adults with Type 1 Diabetes (05/01/17-04/30/21). PI: Dr. Elizabeth Mayer-Davis; My Role: Co-Investigator, 5% effort.

DMS-0904184, National Science Foundation: Collaborative Research: Novel methods for pharmacogenomic data analysis using gene clusters (08/15/09-07/31/12). PI: Dr. Michael R. Kosorok; My Role: Principal Investigator, 5% effort.

Subcontract for R01 DK34108, Pulmonary Benefits of Cystic Fibrosis Neonatal Screening (01/01/07-12/31/11). PI: Dr. Michael R. Kosorok; My Role: Principal Investigator on Subcontract, 8% effort.

R01 DK34108, National Heart, Lung and Blood Institute: Pulmonary Benefits of Cystic Fibrosis Neonatal Screening (05/05/01-03/31/06). PI: Dr. Philip M. Farrell; My Role: Associate Investigator, 20% effort.

Merck & Co.: Methods for interim analysis with incomplete adjudication of events (7/01/09-6/30/11). PI: Dr. Joseph Ibrahim; My Role: Co-Investigator, 10% effort.

UNC-Chapel Hill Public Health Foundation, Inc. (Gillings Innovation Laboratory Award): Innovative disease surveillance methods for the linkange, analysis, and management of large electronic repositories (08/15/08-08/14/10). PI: Dr. David Richardson; My Role: Co-Investigator, 10% effort.

R01 CA075142, National Cancer Institute: Semiparametric and Empirical Process Methods in Oncology (07/01/02-06/30/10). PI: Dr. Michael R. Kosorok; My Role: Principal Investigator, 30% effort.

R29 CA075142, National Cancer Institute: Multivariate Group Sequential Cancer Clinical Trials (07/01/97-06/30/02). PI: Dr. Michael R. Kosorok; My Role: Principal Investigator, 50% effort.

Subcontract for OBSERV04K0, Cystic Fibrosis Foundation: EPIC Observational Study (07/01/06-3/31/09). PI: Dr. Michael R. Kosorok; My Role: Principal Investigator on Subcontract, 3% effort.

GlaxoSmithKline: Independent Statistical Office for GSK Study CKA20001 (03/01/04-12/28/05). PI: Dr. Michael R. Kosorok; My Role: Principal Investigator, 15% effort.

DMS-0139160, National Science Foundation: REU Site - Summer Research Program in Biostatistics (06/01/02-05/31/05). PI: Dr. Michael R. Kosorok; My Role: PI and Co-Director (with Dr. C. David Page also as Co-Director).

SELECTED INVITED PRESENTATIONS:

Centers for Disease Control, workshop on newborn screening for cystic fibrosis, January, 1997.

Indiana University Purdue University at Indianapolis, Department of Mathematical Sciences Seminar, April, 1997.

"Counting Process Methods in Clinical Trials with Multiple Endpoints." Keynote at "Biometrics and Research Statistics Technical Symposium: Survival Analysis." SmithKline Beecham Pharmaceuticals, Collegeville, PA. October, 1997.

Eastern North American Region (ENAR) of the International Biometric Society, Pittsburgh, PA, March, 1998.

University of Georgia-Atlanta, Department of Statistics Seminar, Atlanta, GA, November, 1998.

Memorial Sloan-Kettering Cancer Center, Biostatistics Service Seminar, New York, NY, November, 1998.

University of Michigan, Biostatistics Department Seminar, September, 2000.

National University of Singapore, Statistics and Applied Probability Seminar, December, 2000.

University of Illinois at Urbana-Champaign, Department of Statistics Seminar, September, 2001.

Columbia University, Department of Statistics Seminar, April, 2002.

Rutgers University, Department of Statistics Seminar, April, 2002.

International Conference on Reliability and Survival Analysis, University of South Carolina, May, 2003.

University of Iowa, Department of Statistics and Actuarial Science Seminar, November 6, 2003.

Ohio State University, Department of Statistics Seminar, April, 2004.

International Conference on Statistics in Health Sciences, Nantes University of Pharmacy, Nantes, France, June, 2004.

"Empirical Data and Brownian Motion: Finding Structure in Randomness," Honored Alumni Lecture, College of Physical and Mathemtical Sciences, Brigham Young University, October 14, 2004.

Medical College of Wisconsin, Division of Biostatistics Seminar, November, 2004.

National University of Singapore, Institute for Mathematical Sciences Seminar, March, 2005.

University of Minnesota, School of Statistics Seminar, March, 2005.

Florida State University, Department of Statistics Seminar, April, 2005.

Cornell University, Department of Statistics Seminar, April, 2005.
University of Missouri, Department of Statistics Seminar, April, 2005.
"Longitudinal Development and Clinical Impact of Mucoid *Pseudomonas aeruginosa* Infection," Cystic Fibrosis Foundation Williamsburg Conference, Williamsburg, Virginia, June 3-7, 2005.
International Conference on Statistics, Hong Kong Baptist University, Hong Kong, June, 2005.
Joint Statistical Meetings, Minneapolis, Minnesota, August, 2005.
University of North Carolina-Chapel Hill, Department of Biostatistics Chair Candidate Seminar, October, 2005.
University of Minnesota, School of Statistics Seminar, November, 2005.
Brigham Young University, Department of Statistics Seminar, November, 2005.
Cornell University, Department of Statistical Science Seminar, November, 2005.
Florida State University, Department of Statistics Seminar, November, 2005.
University of Texas MD Anderson Cancer Center, Dept. of Biostatistics and Applied Mathematics Seminar, March, 2006.
ENAR/IMS 2006, Tampa, Florida, March, 2006.
SAMSI Summer Program, Radisson Hotel Research Triangle Park, North Carolina, July, 2006.
North Carolina State University, Department of Statistics Seminar, October, 2006.
University of Michigan, Department of Statistics and Department of Biostatistics Joint Seminar, November, 2006.
National Institute of Environmental Health Sciences, Biostatistics Branch Seminar, December, 2006.
Medical University of South Carolina, Dept. of Biostatistics, Bioinformatics and Epidemiology Seminar, December, 2006.
Invited roundtable discussion leader, ENAR Meeting, Atlanta, Georgia, March 11-14, 2007.
University of North Carolina-Chapel Hill, Department of Statistics and Operations Research Colloquium, March , 2007.
ICSA Applied Statistics Symposium, Raleigh, North Carolina, June, 2007.
Joint Statistical Meetings, Salt Lake City, Utah, August, 2007.
Duke University, Department of Biostatistics and Bioinformatics, Seminar, September, 2007.
Conference on "Current and Future Trends in Nonparametrics," University of South Carolina, October, 2007.
University of Washington, Departments of Biostatistics and Statistics, Joint Seminar, November, 2007.
James Madison University Department of Mathematics and Statistics Coloquium, December, 2007.
Brigham Young University, Department of Statistics, Seminar, February, 2008.
ENAR Meeting, Arlington, Virgina, March, 2008.
"Theory Versus Applications: Tension on the Cutting Edge." Keynote address at the Southern Regional Council on Statistics, Charleston, South Carolina, June 8-11, 2008.
Joint Statistical Meetings. Denver, Colorado, August, 2008.
Columbia University, Department of Biostatistics Coloquium, February, 2009.
Purdue University, Department of Statistics Research Coloquium, March, 2009.
University of Wisconsin-Madison, Department of Biostatistics and Medical Informatics Seminar, March, 2009.
Symposium on "New Directions in Asymptotics Statistics," Athens, Georgia, May, 2009.
First Institute of Mathematical Statistics Asia Pacific Rim Meeting, Seoul, South Korea, June, 2009.
North Carolina State University, Department of Statistics, Biostatistics Seminar, September, 2009.
UNC-Chapel Hill Department of Biostatistics 60th Anniversary Celebration, Chapel Hill, North Carolina, October, 2009.
UNC-Chapel Hill Department of Radiation Oncology, Biostatistics Seminar, Educational Session, November, 2009.
UNC-Chapel Hill Department of Biostatistics Seminar, January, 2010.
McGill University CRM-ISM-GERAD Statistics Colloguium, February, 2010.
ENAR Meeting, New Orleans, Louisiana, March, 2010.
University of Wisconsin-Madison 50th Anniversary Conference, Madison, Wisconsin, June, 2010.
Journal Panel Talk. Institute of Mathematical Statistics New Researchers Conference, Vancover, Canada, July, 2010.
"Reinforcement Learning, Clinical Trials and Personalized Medicine." From Probability to Statistics and Back: High-Dimensional Models and Processes, Conference in honor of Jon A. Wellner, Seattle, Washington, July, 2010.
Joint Statistical Meetings, Vancouver, Canada, August, 2010.
"Reinforcement Learning, Clinical Trials and Personalized Medicine." University of Rochester, Department of Biostatistics and Computation Biology, Yakovlev Colloquium Speaker, September 9, 2010.
Emory University, Department of Biostatistics and Bioinformatics Seminar, November, 2010.
University of Chicago, Department of Health Studies Seminar, November , 2010.
ENAR Meeting, Miami, Florida, March, 2011.
University of Pittsburgh, Department of Biostatistics Seminar, April, 2011.
Columbia University, Department of Biostatistics Seminar, April, 2011.
NSF Workshop on High Dimensional Data, Nantucket, MA, May 12-14, 2011.
"Personalized Medicine and Clinical Trials." Plenary speaker, Conference entitled "High Dimensional Data: Advances and Challenges," Nanyang Technological University, Singapore, May 24-27, 2011.
SRCOS Summer Research Conference, Hickory Knob State Park, South Carolina, June, 2011.
University of Virginia, School of Medicine, Division of Biostatistics and Epidemiology, June, 2011.
JSM, Miami Beach, Florida, August, 2011.

Johns Hopkins University, School of Public Health, Department of Biostatistics, September, 2011.
Michigan State University, Science on the Edge Quantitative Biology and Modeling Seminar, February, 2012.
ENAR Workshop for Junior Researchers, Washington, D.C., March, 2012.
Harvard University, Department of Biostatistics, Personalized Medicine Workshop, May, 2012.
8th International Purdue Symposium on Statistics, Purdue University, June, 2012.
International Chinese Statistical Association 21st Applied Statistics Symposium, Boston, MA, June, 2012.
"Personalized Medicine and Statistical Learning," Plenary talk at the 2012 International Pharmaceutical Statistics Workshop, Shanghai, China, July 10-12, 2012.
Soochow University, Center for Advanced Statistics and Econometrics Research, Suzhou, China, July, 2012.
Joint Statistical Meetings, San Diego, CA, August, 2012.
"Advanced Topics in Personalized Medicine and Dynamic Treatment Regimes" in invited workshop on "Personalized Medicine and Dynamic Treatment Regimes" at the Second IMPACT Symposium, Raleigh, NC, November 1-2, 2012.
George Mason University, Department of Statistics, November, 2012.
ENAR Meeting, Orlando, FL, March, 2013.
Symposium on Clinical Trials, Penn State University, April, 2013.
Society for Clinical Trials Meeting, Boston, MA, May, 2013.
Statistical Science in Society, University of Waterloo, July/August, 2013.
Joint Statistical Meetings, Montreal, QC, Canada, August, 2013. Invited talk and invited workshop entitled "Personalized Medicine and Dynamic Treatment Regimes" (joint with E. B. Laber).
Medical Research Council, Cambridge, UK, September, 2013.
FDA, Silver Spring, MD, October, 2013.
International Conference on Health Statistics, Chicago, IL. October, 2013.
FDA Public Workshop: "Complex Issues in Rare Disease Drug Development" (panelist), Silver Spring, MD, January, 2014
NCI, Bethesda, MD, February, 2014.
ENAR Meeting, Baltimore, MD, March, 2014.
Expert Workshop: "Pioneering Statistical Approaches to Accelerate Drug Development through Adaptive Trial Designs" (panelist and speaker), Brookings Institute, Washington DC, March, 2014.
DIA/FDA Statistics Forum, Bethesda, MD, April, 2014.
Memorial Sloan Kettering Cancer Center, Department of Epidemiology and Biostatistics, April, 2014.
University of California-San Francisco Seminar: Big Data to Advance Biomedical Science, Population Health, April, 2014.
Columbia University Statistics Department Conference: Nonparametric Measures of Dependence, May, 2014.
Inserm Workshop on Methodological Issues in Personalized and Predictive Medicine, Bordeaux, France, June, 2014.
International Conference on Survival Analysis in Memory of John P. Klein, Milwaukee, WI, June, 2014.
Joint Statistical Meetings, Boston, MA, August, 2014.
University of Michigan Departments of Biostatistics and Statistics Joint Seminar, September, 2014.
North American Cystic Fibrosis Meeting, Atlanta, GA, October, 2014.
FDA Workshop on "Sequential Multiple Assignment Randomized Trials" (presenter), Silver Spring, MD, October, 2014.
McGill University; Department of Epidemiology, Biostatistics and Occupational Health; February, 2015.
Virginia Commonwealth University, Department of Biostatistics, February, 2015
ENAR Meeting, Miami, FL, March, 2015.
Myra Samuels Memorial Lecture, Purdue University, Department of Statistics, April, 2015.
SAMSI Innovations Lab on Interdisciplinary Approaches to Biomedical Data Science Challenges, Research Triangle Park, NC, July, 2015.
Joint Statistical Meetings, Seattle, WA, August ,2015. Introductory Overview Lecture (joint with E. B. Laber and E. E. M. Moodie) and Medallion Lecture.
Harvard University Department of Biostatistics Big Data Symposium, November, 2015.
ENAR Meeting, Austin, TX, March, 2016.
Distinguished Alumni Lecture, University of Washington, Department of Biostatistics, May, 2016.
Plenary Speaker, Conference on Statistical Learning and Data Science, Chapel Hill, NC, June, 2016.
Distinguished Lecturer, IMS Asia Pacific Rim Meeting, Hong Kong, June, 2016.
Hong Kong Baptist University, Department of Mathematics, Hong Kong, June, 2016.
Keynote Speaker, SINAPE 22 Meeting, Porto Alegre, Brazil, July, 2016.
Joint Statistical Meetings, Chicago, IL, August, 2016. JASA Theory and Methods Invited Discussion Speaker, Panel Discussant, Invited Session Discussant, and Lunch Speaker.
Helen Barton Lecture Series Speaker, University of North Carolina at Greensboro, Department of Mathematics and Statistics, October, 2016.
University of Pennsylvania, Wharton School, Department of Statistics, October, 2016.
Wilks Statistics Seminar, Princeton University, Department of Operations Research and Financial Engineering, December 2016.
ENAR Meeting, Washington DC, March, 2017.

Statistics Colloquium, University of Chicago, Department of Statistics, May, 2017.
Discussant, Atlantic Causal Inference Conference, University of North Carolina at Chapel Hill, May, 2017.
Research Symposium, AgBiome, Durham, NC, June, 2017.
European Meeting of Statisticians, Helsinki, Finland, July, 2017.
Joint Statistical Meetings, Baltimore, MD, August, 2017. JASA Applications and Case Studies Invited Discussion Speaker and Lunch Speaker.
Cornell Day of Statistics, Cornell University, Department of Statistical Science, September, 2017.
Keynote Speaker, Innovative Statistics and Machine Learning for Precision Medicine Workshop, University of Minnesota, Institute of Mathematics and its Applications, September, 2017.
Biostatistics in the Modern Computing Era, Medical College of Wisconsin, Milwaukee, Wisconsin, September, 2017.
Keynote Speaker, Conference on Statistics and Health (Personalized Medicine and Big Data), Institut de Mathématiques de Toulouse, Toulouse, France, January, 2018.
Workshop on the Interface of Machine Learning and Statistical Inference, Banff International Research Station, Banff National Park, Alberta, Canada, January, 2018.
ENAR Meeting, Atlanta, GA, March, 2018.
Biostatistics Colloquium (Levin Lecture Series), Columbia University, Department of Biostatistics, March, 2018.
Mathematics and Statistics Colloquium (Interdisciplinary Data Sciences Seminar Series), University of South Florida, Department of Mathematics and Statistics, April, 2018.
Statistics Colloquium, Penn State University, Department of Statistics, April, 2018.
Special Invited Talk, International Indian Statistical Association Conference, University of Florida, May, 2018.
Keynote Speaker, Southern Regional Council on Statistics (SRCOS) Conference, Virginia Beach, VA, June, 2018.
Session Co-organizer and Discussant, Society for Epidemiologic Research (SER), Baltimore, MD, June, 2018.

Ph.D./Dr.PH. STUDENT SUPERVISION:

1. Wei-Hsiung Chao (Ph.D. graduate, 1996, UW-Madison)
2. Wen-Hsiang Wei (Ph.D. graduate, 1996, UW-Madison)
3. Chin-Yu Lin (Ph.D. graduate, 1998, UW-Madison)
4. Muhammad Jalaluddin (Ph.D. graduate, 1999, UW-Madison)
5. Bee Leng Lee (Ph.D. graduate, 2000, UW-Madison)
6. Yuanjun Shi (Ph.D. graduate, 2001, UW-Madison)
7. John R. Dixon (Ph.D. graduate, 2003, UW-Madison)
8. Shuangge Ma (Ph.D. graduate, 2004, UW-Madison)
9. Guang Cheng (Ph.D. graduate, 2006, UW-Madison)
10. Minjung Kwak (Ph.D. graduate, 2006, UW-Madison)
11. Rui Song (Ph.D. graduate, 2006, UW-Madison)
12. Shanhong Guan (Ph.D. graduate, 2007, UW-Madison)
13. Rajat Mukherjee (Ph.D. graduate, 2007, co-advised with Jason P. Fine, UW-Madison)
14. Nivedita Nadkarni (Ph.D. graduate, 2007, UW-Madison)
15. Sang-Hoon Cho (Ph.D. graduate, 2008, co-advised with Richard A. Johnson, UW-Madison)
16. Yufan Zhao (Ph.D. graduate-Biostatistics, 2009, UNC-Chapel Hill)
17. Hongyuan Cao (Ph.D. graduate-Statistics, 2010, UNC-Chapel Hill)
18. Kai Ding (Ph.D. graduate-Biostatistics, 2010, co-advised with Donglin Zeng, UNC-Chapel Hill)
19. Yiyun Tang (Ph.D. graduate-Biostatistics, 2010, UNC-Chapel Hill)
20. Chaeryon Kang (Ph.D. graduate-Biostatistics, 2011, UNC-Chapel Hill)
21. Yingqi Zhao (Ph.D. graduate-Biostatistics, 2012, UNC-Chapel Hill)
22. Ruoqing Zhu (Ph.D. graduate-Biostatistics, 2013, UNC-Chapel Hill)
23. Guanhua (Alan) Chen (Ph.D. graduate-Biostatistics, 2014, UNC-Chapel Hill)
24. Sayan Dasgupta (Ph.D. graduate-Biostatistics, 2014, UNC-Chapel Hill)
25. Steven Hoberman (Ph.D. graduate-Biostatistics, 2014, co-advised with Anastasia Ivanova, UNC-Chapel Hill)
26. Susan Wei (Ph.D. graduate-Statistics, 2014, co-advised with J. Stephen Marron, UNC-Chapel Hill)
27. Pourab Roy (Ph.D. graduate-Biostatistics, 2015, co-advised with Jason P. Fine, UNC-Chapel Hill)
28. Xin Zhou (Ph.D. graduate-Biostatistics, 2015, UNC-Chapel Hill)
29. Emily Butler-Bente (Ph.D. graduate-Biostatistics, 2016, co-advised with Eric B. Laber, UNC-Chapel Hill)
30. Sebastian Teran Hidalgo (Ph.D. graduate-Biostatistics, 2016, co-advised with Michael C. Wu, UNC-Chapel Hill)
31. Anna Bellach (Ph.D. graduate-Biostatistics, 2017, co-advised with Theis Lange and Jason P. Fine, University of Copenhagen)
32. Monica Chaudhari (Dr.PH. dissertator-Biostatistics, 2017, UNC-Chapel Hill)
33. Jingxiang (Sean) Chen (Ph.D. graduate-Biostatistics, 2017, co-advised with Yufeng Liu, UNC-Chapel Hill)
34. Jonathan Hibbard (Ph.D. graduate-Biostatistics, 2017, UNC-Chapel Hill)
35. Yifan Cui (Ph.D. graduate-Statistics, 2018, co-advised with Jan Hannig, UNC-Chapel Hill)

36. Daniel J. Luckett (Ph.D. graduate-Biostatistics, 2018, co-advised with Eric B. Laber, UNC-Chapel Hill)
37. Arkopal Choudhury (Ph.D. student-Biostatistics, 2015, UNC-Chapel Hill)
38. Michael Lawson (Ph.D. student-Biostatistics, 2015, UNC-Chapel Hill)
39. Xiaotong (Phoebe) Jiang (Ph.D. student-Biostatistics, 2016, UNC-Chapel Hill)
40. Duyeol Lee (Ph.D. student-Statistics, 2016, co-advised with Kai Zhang, UNC-Chapel Hill)
41. Crystal Nguyen (PhD student-Biostatistics, 2016, UNC-Chapel Hill)
42. Hunyong Cho (PhD student-Biostatistics, 2017, UNC-Chapel Hill)
43. Teeranan (Ben) Pokaprakarn (PhD student-Biostatistics, 2017, UNC-Chapel Hill)

M.S. STUDENT SUPERVISION:

Zheng Ren (M.S. graduate-Biostatistics, UNC-Chapel Hill, 2011)

BSPH HONORS THESIS SUPERVISION:

Mengbing Li (BSPH graduate with highest honors-Biostatistics, UNC-Chapel Hill, 2017)

POSTDOCTORAL FELLOW SUPERVISION:

Rui Song, Ph.D. (2006-2008, UNC-Chapel Hill)
Yair Goldberg, Ph.D. (2009-2011, UNC-Chapel Hill)

UNC-CHAPEL HILL SERVICE:

Chair of Biostatistics Department (2006-2016, 2017-)
Served on numerous student thesis committees for the Department of Biostatistics and for other departments
Director of NC TraCS (CTSA) Biostatistics Core (2008-present)
School of Nursing Strategic Planning Advisory Committee (2018)
University Facilities and Administrative Review Task Force (2009-2012)
University Clinical Trials Task Force (2016-2017)
University Data Science Initiative (2016-2018)
University Undergraduate Race-Neutral Strategies Working Group (2016-present)

Courses Taught:

Fall 2015	Biostatistics 600 (Co-Instructor): Principles of Statistical Inference
Fall 2008, 2010, 2012, 2014, 2017	Biostatistics 760: Advanced Probability and Statistical Inference (I)
Spring 2008, 2010, 2012, 2014, 2016	Biostatistics 791: Empirical Processes and Semiparametric Inference

UW-MADISON SERVICE:

Search and Screen Committee for General Clinical Research Center Director (Fall 1996-Spring 1997)
State Employee Combined Campaign Coordinator for the Medical School (Fall 1999)
College of Letters and Science, Faculty Appeals Committee (Spring 1999-Spring 2003)
Medical School Tenure and Promotions Committee (Fall 2004-Spring 2006)
Served on numerous student thesis committees for the Department of Statistics and for other departments

Department of Statistics Committees:

Masters Exam Committee (Fall 1992 - Fall 1995), Chair (Fall 1994 – Spring 1995)
Admissions Committee (Spring 1996 - Fall 2001), Chair (Fall 1998 – Spring 2001
ADA Liaison (Fall 1996)
New Student Revising and Review (Fall 1998-Spring 1999)
Ph.D. Qualifier Exam Committee (Fall 1999-Fall 2006), Chair (Fall 2002 – Fall 2006)
Chair, Faculty Search Committee (Fall 2004-Spring 2005)

Department of Biostatistics and Medical Informatics Committees:

Co-Chair, Biostatistics Consulting Seminar Series (Fall 1992 to Spring 1993)
Chair, Biostatistics Student Seminar Series (Fall 1993 to Spring 1994)
Member, Biostatistics Training Program Committee (Fall 1998 to Spring 2006)
Director, Summer Research Program in Biostatistics (Fall 1999 to Spring 2001, Fall 2002 to Summer 2005)

Courses Taught:

Fall 1992, Spring 1993	Statistics 201 (Introductory Statistics)
Fall 2002	Statistics 312 (Introduction to Mathematical Statistics)
Fall 1994, 1995, 1996	Statistics 541 (Introduction to Biostatistics)
Spring 2004, 2006	Statistics 732 (Large Sample Theory of Statistics)
Spring 1995, 1997, 1999	Statistics 741 (Survival Analysis)
Fall 1993	Statistics 992 (Counting Processes and Survival Analysis)
Spring 2001, 2005	Statistics 992 (Empirical Processes and Semiparametric Inference)
Spring 1994, 1996, 1998, 2000, 2003 Fall 2003, 2004, 2005	Statistics 998 (Statistical Consulting)