

## Curriculum Vitae

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Department of Biostatistics  
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### EDUCATION

Ph.D. Department of Statistics, The University of Michigan, Ann Arbor, 2001  
 Ph.D. Candidate Department of Mathematics, Purdue University, West Lafayette, 1995-1996  
 M.S. Department of Mathematics, The University of Science and Technology of China, Hefei, 1995  
 B.S. Department of Mathematics, The University of Science and Technology of China, Hefei, 1993

### PROFESSIONAL EXPERIENCE

Professor Department of Biostatistics, The University of North Carolina, 2012 - present  
 Co-director Carolina Survey Research Lab, Department of Biostatistics, The University of North Carolina, 2011 - 2019  
 Associate Professor Department of Biostatistics, The University of North Carolina, 2007 - 2012  
 Visiting Professor Department of Mathematics, Hong Kong University of Sci. & Tech., 2008 Nov  
 Visiting Professor Mathematical Center, Peking University, Beijing, China, 2008 July - Oct  
 Assistant Professor Department of Biostatistics, The University of North Carolina, 2001 - 2007  
 Research Assistant Center for Statistical Consulting and Research, The University of Michigan, Ann Arbor, 2000 - 2001  
 Summer Intern Merck Research Lab, Rahway, New Jersey, May-July, 2000  
 Teaching Assistant Department of Statistics, The University of Michigan, Ann Arbor, 1996-2000  
 Teaching Assistant Department of Mathematics, Purdue University, West Lafayette, 1995-1996  
 Teaching Assistant Department of Mathematics, University of Science and Technology of China, Hefei, 1993-1995

### HONORS & AWARDS

1. Delta Omega Faculty Award, Department of Biostatistics, The University of North Carolina, 2013.
2. Elected Fellow of American Statistical Association, 2011.
3. Elected Fellow of Institute of Mathematical Statistics, 2010.
4. Roy Kuebler Fund Award, Department of Biostatistics, The University of North Carolina, 2008.
5. Noether Young Scholar Award, American Statistical Association, 2008.

6. Junior Faculty Developmental Award, The University of North Carolina, 2006.
7. Center for AIDS Research Development Award, The University of North Carolina, 2002
8. Travel Award, Rackham Graduate School, The University of Michigan, 2001
9. Excellence Award in Qualifying Exams, Department of Statistics, The University of Michigan, 1997
10. Guo-Moruo Award, The University of Science and Technology of China, 1993
11. College Mathematical Contest Team Award, Academia Sinica of China, 1991

#### PROFESSIONAL MEMBERSHIPS (Active)

1. ENAR, AAAS
2. American Statistical Association
3. Institute of Mathematical Statistics
4. International Chinese Statistical Association

#### PEER REVIEWED PUBLICATIONS (METHODOLOGICAL PART)

1. Zou, H., Li, K., **Zeng, D.**, and Luo, S. (2021). Bayesian Inference and Dynamic Prediction of Multivariate Joint Model with Functional Data: An Application to Alzheimer's Disease. *Statistics in Medicine*, in press.
2. Chen, T., Chen, Y., **Zeng, D.** and Wang, Y. (2021). Self-Matched Learning to Construct Treatment Decision Rules from Electronic Health Records. *Statistics in Medicine*, in press.
3. Wong, K., **Zeng, D.** and Lin, D. (2021). Penalized Regression for Multiple Types of Many Features with Missing Data. *Statistica Sinica*, in press.
4. Lin, D., Gu, Y., **Zeng, D.**, Janes, H., and Gilbert, P. (2021). Evaluating Vaccine Efficacy Against SARS-CoV-2 Infection *Clinical Infectious Diseases*, in press.
5. Wong, K., **Zeng, D.** and Lin, D. (2021). Semiparametric Latent-class Models for Multivariate Longitudinal and Survival Data. *The Annals of Statistics*, in press.
6. Gu, Y., Preisser, J., **Zeng, D.**, Shrestha, P., Shah, M., Simancas-Pallares, M., Ginnis, J., and Divaris, K. (2021). Partitioning around Medoids Clustering and Random Forest Classification for GIS-Informed Imputation of Fluoride Concentration Data. *The Annals of Applied Statistics*, in press.
7. Gao, F., **Zeng, D.**, and Wang, Y. (2021). Semiparametric Regression Analysis of Bivariate Censored Events in a Family Study of Alzheimer's Disease. *Biostatistics*, in press.
8. Jia, B., **Zeng, D.**, Liao, J., Liu, G., Tan, X., Diao, G., and Ibrahim, J. (2021). Inferring Latent Heterogeneity Using Many Feature Variables Supervised by Survival Outcome. *Statistics in Medicine*, in press.
9. Lin, D., **Zeng, D.**, and Gilbert, P. (2021). Evaluating the Long-Term Efficacy of COVID-19 Vaccines. *Clinical Infectious Diseases*, in press.

10. Lou, J., Wang, Y., Li, L., and **Zeng, D.** (2021). Learning Latent Heterogeneity for Type 2 Diabetes Patients Using Longitudinal Health Markers in Electronic Health Records. *Statistics in Medicine*, accepted.
11. Lin, D., **Zeng, D.**, Mehrotra, D., Corey, L., and Gilbert, P. (2021). Evaluating the Efficacy of COVID-19 Vaccine. *Clinical Infectious Diseases*, in press.
12. Agans, R., **Zeng, D.** and Shook-Sa, B., Boynton, M., Brewer, N., Stutfin, E., Goldstein, A., ..., and Kurt, R. (2021). Using Social Networks to Supplement RDD Telephone Surveys to Oversample Hard-to-Reach Populations: A New RDD+RDS Approach. *Sociological Methodology*, accepted.
13. Deng, Y., Cai, J., and **Zeng, D.** (2021). Maximum Likelihood Estimation for Cox Proportional Hazards Model with a Change Hyperplane. *Statistica Sinica*, in press.
14. **Zeng, D.** and Lin, D. Y. (2021). Maximum Likelihood Estimation for Semiparametric Regression Models with Panel Count Data. *Biometrika*, in press.
15. Rashid, N., Lockett, D., Chen, J., Lawson, M., Wang, L., Zhang, Y., Laber, E., Liu, Y., Yen, J., **Zeng, D.** and Kosorok, M. (2021). High Dimensional Precision Medicine from Patient-Derived Xenografts. *Journal of the American Statistical Association*, in press.
16. Zhou, W., Zhu, R., and **Zeng, D.** (2021). A Parsimonious Personalized Dose-Finding Model via Dimension Reduction. *Biometrika*, in press.
17. Diao, G., **Zeng, D.**, Liu, G., Zhang, Y., Golm, G., and Ibrahim, J. (2021). Efficient Multiple Imputation for Sensitivity Analysis of Recurrent Events Data with Informative Censoring. *Statistics in Biopharmaceutical Research*, in press.
18. Lin, D. Y., Eron, J., and **Zeng, D.** (2021). Evaluating the Efficacy of Therapies in COVID-19 Patients. *Clinical Infectious Diseases*, **72**, 1093-1100.
19. Xie, S., **Zeng, D.**, and Wang, Y. (2021). Integrative Network Learning for Multi-modality Biomarker Data. *The Annals of Applied Statistics*, in press.
20. Chen, Y., **Zeng, D.**, and Wang, Y. (2021). Learning Individualized Treatment Rules for Multi-Domain Latent Outcomes. *Journal of the American Statistical Association*, **116**, 269-282.
21. Chen, Y., **Zeng, D.**, Song, T., and Wang, Y. (2020). Integrating Multi-domain Outcomes for Learning Optimal Individualized Treatment Rules. *NeuIPS 2020*.
22. Chen, Y., Wang, Y. , and **Zeng, D.** (2020). Synthesizing Independent Stagewise Trials for Optimal Dynamic Treatment Regimes. *Statistics in Medicine*, **39**, 4107-4119.
23. Yu, H., Wang, Y., and **Zeng, D.** (2020) Sparse Nonparametric Regression With Regularized Tensor Product Kernel. *Stat*, **9**, e300..
24. Wang, Q., Xie, S., Wang, Y., and **Zeng, D.** (2020). Survival-Convolution Models for Predicting COVID-19 Cases and Assessing Effects of Mitigation Strategies. *Frontiers in Public Health, Section Infectious Diseases–Surveillance, Prevention and Treatment*, <https://doi.org/10.3389/fpubh.2020.0>
25. Lin, D., **Zeng, D.**, and Couper, D. (2020). A General Framework for Integrative Analysis of Incomplete Multi-Omics Data. *Genetic Epidemiology*, **44**, 646-664.

26. Zhu, A., Zeng, D., Li, S., Xia, N., Li, L., and Zhang, P. (2020). A Super-Combo-Drug Test (SupCD-T) to Detect Adverse Drug Events and Drug Interactions from Electronic Health Records in the Era of Polypharmacy. *Statistics in Medicine*, **39**, 1458-1472.
27. Wu, P., Zeng, D., Fu, H., and Wang, Y. (2020). On Using Electronic Health Records to Improve Optimal Treatment Rules in Randomized Trials. *Biometrics*, **76**, 1075-1086.
28. Sun, M., Zeng, D., and Wang, Y. (2020). Modeling Temporal Biomarkers with Semiparametric Nonlinear Dynamic Systems. *Biometrika*, **108**, 199-214.
29. Xie, S., Li, X., McColgan, P., Scahill, R., Zeng, D., and Wang, Y. (2020). Identifying Disease-Associated Biomarker Network Features Through Conditional Graphical Model. *Biometrics*, **76**, 995-1006.
30. Zhou, X., Wang, Y. and Zeng, D. (2020). Multicategory Classification via Forward-Backward Support Vector Machine. *Communications in Mathematics and Statistics*, **8**, 319-339.
31. Tao, R., Zeng, D. and Lin, D. Y. (2020). Optimal Designs of Two-Phase Studies. *Journal of the American Statistical Association*, **115**, 1946-1959.
32. Zeng, D., Pan, Z. and Lin, D. Y. (2020). Design and Analysis of Bridging Studies With Prior Probabilities on the Null and Alternative Hypotheses. *Biometrics*, **76**, 224-234.
33. Li, X., Li, Q., Zeng, D., Marder, K., Paulsen, J. and Wang, Y. (2020) Time-varying Hazards Model for Incorporating Irregularly Measured, High-Dimensional Biomarkers. *Statistica Sinica*, **30**, 1605-1632.
34. Wu, P., Zeng, D. and Wang, Y. (2020). Matched Learning for Optimizing Individualized Treatment Strategies Using Electronic Health Records. *Journal of the American Statistical Association*, **115**, 380-392.
35. Li, X., Zeng, D., Karen, M. and Wang, Y. (2020). Constructing Disease Onset Signatures Using Multi-Dimensional Network-Structured Biomarkers. *Biostatistics*, **21**, 122-138.
36. Tan, X., Liu, G., Zeng, D., Wang, W., Diao, G., Heyse, J. and Ibrahim, J. (2019). Controlling False Discovery Proportion in Identification of Drug-Related Adverse Events from Multiple System Organ Classes. *Statistics in Medicine*, **38**, 4378-4389.
37. Sun, M., Zeng, D. and Wang, Y. (2019). Leveraging Nonlinear Dynamic Models to Predict Progression of Neuroimaging Biomarkers. *Biometrics*, **75**, 1240-1252.
38. Diao, G., Zeng, D., Hu, K., and Ibrahim, J. (2019). Semiparametric Frailty Models for Zero-Inflated Event Count Data in the Presence of Informative Dropout. *Biometrics*, **75**, 1168-1178.
39. Hyun, N., Zeng, D., Couper, D., and Pankow, J. (2019). Gumbel Regression Models for A Monotone Increasing Continuous Biomarker Subject to Measurement Error. *Journal of Statistical Planning and Inference*, **203**, 160-168.
40. Zhao, Y., Zeng, D., Tangen, C., and LeBlanc, M. (2019). Robustifying Trial-Derived Optimal Treatment Rules for A Target Population. *Electronic Journal of Statistics*, **13**, 1717-1743.

41. Diao, G., Liu, G., **Zeng, D.**, Wang, W., Tan, X., Heyse, J., and Ibrahim, J. (2019). Efficient Methods for Signal Detection from Correlated Adverse Events in Clinical Trials. *Biometrics*, **5**, 1000-1008.
42. Wong, K. Y., Fan, C., Tanioka, M., Parker, J., Nobel, A., **Zeng, D.**, Lin, D. Y., and Perou, C. M. (2019). I-Boost: An Integrative Boosting Approach for Predicting Survival Time with Multiple Genomics Platforms. *Genome Biology*, **20**, 52.
43. Gao, F., Wang, Y. and **Zeng, D.** (2019). Early Diagnosis of Neurological Disease Using Peak Degeneration Ages of Multiple Biomarkers. *The Annals of Applied Statistics*, **2**, 1295-1318.
44. Jiang, B., Li, J., Rong, R. and **Zeng, D.** (2019). Entropy Learning for Dynamic Treatment Regimes (with Discussion). *Statistica Sinica*, **29**, 1633-1655.
45. Sun, Q., Zhu, R., Wang, T. and **Zeng, D.** (2019) Counting Process Based Dimension Reduction Methods for Censored Outcomes. *Biometrika*, **106**, 181-196.
46. Wong, K. Y., **Zeng, D.** and Lin, D. (2019) Robust Score Tests with Missing Data in Genomics Studies. *Journal of the American Statistical Association*, **114**, 1778-1786.
47. Zhu, W., **Zeng, D.** and Song, R. (2019). Proper Inference for Value Function in High-Dimensional Q-Learning for Dynamic Treatment Regimes. *Journal of the American Statistical Association*, **114**, 1404-1417.
48. Gao, F., **Zeng, D.**, Couper, D. and Lin, D. (2019). Semiparametric Regression Analysis of Multiple Right- and Interval-Censored Events. *Journal of the American Statistical Association*, **114**, 1232-1240.
49. Zhu, A., **Zeng, D.**, Zhang, P. and Li, L. (2019). Estimating Causal Log-Odds Ratio Using the Case-Control Sample and Its Application in the Pharmaco-Epidemiology Study. *Statistical Methods in Medical Research*, **28**, 2165-2178.
50. Liang, B., Wang, Y., and **Zeng, D.** (2019). Semiparametric Transformation Models with Multi-level Random Effects for Correlated Disease Onset in Families. *Statistica Sinica*, **29**, 1851-1871.
51. Li, X., Xie, S., McColgan, P., Tabrizi, S., Scahill, R., **Zeng, D.** and Wang, Y. (2018) Learning Subject-Specific Directed Acyclic Graphs with Mixed Effects Structural Equation Models from Observational Data. *Frontier in Genetics*, **9**, 430.
52. Zhou, X., Wang, Y. and **Zeng, D.** (2018) Outcome-Weighted Learning for Personalized Medicine with Multiple Treatment Options. *Proceeding of International Conference on Data Science and Advanced Analytics*, 2018:565-574..
53. Kim, S., **Zeng, D.** and Cai, J. (2018). Analysis of Multiple Survival Events in Generalized Case-Cohort Designs. *Biometrics*, **74**, 1250-1260.
54. Liu, Y., Wang, Y., Kosorok, M., Zhao, Y. and **Zeng, D.** (2018). Augmented Outcome-weighted Learning for Estimating Optimal Dynamic Treatment Regimens. *Statistics in Medicine*, **37**, 3776-3788.

55. Wang, Y., Fu, H. and **Zeng, D.** (2018). Learning Optimal Personalized Treatment Rules in Consideration of Benefit and Risk: with an Application to Treating Type 2 Diabetes Patients with Insulin Therapies. *Journal of the American Statistical Association*, **113**, 1-13.
56. Wong, A., **Zeng, D.** and Lin, D. Y. (2018). Efficient Estimation for Semiparametric Structural Equation Models With Censored Data. *Journal of the American Statistical Association*, **113**, 893-905.
57. Li, X., Xie, S., **Zeng, D.** and Wang, Y. (2018). Efficient l0-Norm Feature Selection Based on Augmented and Penalized Minimization. *Statistics in Medicine*, **37**, 473-486.
58. Qiu, X., **Zeng, D.** and Wang, Y. (2018). Estimation and Evaluation of Linear Individualized Treatment Rules to Guarantee Performance. *Biometrics*, **74**, 517-528.
59. Diao, G., **Zeng, D.**, Ke, C., Ma, H., Jiang, Q. and Ibrahim, J. (2018). Semiparametric Regression Analysis for Composite Endpoints Subject to Component-Wise Censoring. *Biometrika*, **105**, 403-418.
60. Gao, F., **Zeng, D.** and Lin, D. (2018). Semiparametric Regression Analysis of Interval-Censored Data With Informative Dropout. *Biometrics*, **74**, 1213-1222.
61. Zhang, P., Li, M., Chiang, C., Xiang, Y., Cheng, L., Feng, W., Schleyer, T., Quinney, S., Wu, H., **Zeng, D.** and Li, L. (2018). A Three-Component Mixture Model Based Adverse Drug Event Signal Detection for the Adverse Event Reporting System. *Pharmacometrics & Systems Pharmacology*, **7**, 499-506.
62. **Zeng, D.**, Hyun, N. and Cai, J. (2018). Semiparametric Additive Model for Estimating Risk Difference in Multicenter Studies. *Biostatistics and Epidemiology*, **2**, 84-98.
63. Diao, G., Dong, J., **Zeng, D.**, Ke, C., Rong, A. and Ibrahim, J. (2018). Biomarker Threshold Adaptive Designs for Survival Endpoints. *Journal of Biopharmaceutical Statistics*, **13**, 1-17.
64. Zhang P., Wu H., Chiang C., Wang L., Binkheder S., Wang X., **Zeng D.**, Quinney S.K., and Li L. (2018). Translational Biomedical Informatics and Pharmacometrics Approaches in The Drug Interactions Research. *Pharmacometrics & Systems Pharmacology*, **7**, 90-102.
65. Wang, X., Zhang, P., Chiang, C., Wu, H., Shen, L., Ning, X., **Zeng, D.**, Wang, L., Quinney, S., Feng, W. and Li, L. (2018). Mixture Drug-Count Response Model for the High Dimensional Drug Combinatory Effect on Myopathy. *Statistics in Medicine*, **37**, 673-686.
66. Choi, J., **Zeng, D.**, Olshan, A. F. and Cai, J. (2018). Joint Modeling of Survival Time and Longitudinal Outcomes with Flexible Random Effects. *Lifetime Data Analysis*, **24**, 126-152.
67. **Zeng, D.**, Pan, J., Hu, K., Chi, E. and Lin, D. Y. (2017). Improving the Power to Establish Clinical Similarity in a Phase 3 Efficacy Trial by Incorporating Prior Evidence of Analytical and Pharmacokinetic Similarity. *Journal of Biopharmaceutical Statistics*, **28**, 320-332.
68. Gao, F., Liu, G., **Zeng, D.**, Xu, L., Lin, B., Diao, G., Glom, G., Hyese, J., and Ibrahim, J. (2017). Control-based Imputation for Sensitivity Analyses in Informative Censoring for Recurrent Event Data. *Pharmaceutical Statistics*, **16**, 424-432.

69. Diao, G., **Zeng, D.**, Hu, K., and Ibrahim, J. (2017). Modeling Event Count Data in The Presence of Informative Dropout with Application to Bleeding and Transfusion Events in Myelodysplastic Syndrome. *Statistics in Medicine*, **36**, 3475-3494.
70. Gao, F., Dong, J., **Zeng, D.**, Rong, A. and Ibrahim, J. (2017). Pattern Mixture Models for Clinical Validation of Biomarkers in The Presence of Missing Data. *Statistics in Medicine*, **36**, 2994-3004.
71. Choi, J., **Zeng, D.** and Cai, J. (2017). Penalized Likelihood Approach for Simultaneous Analysis of Survival Time and Binary Longitudinal Outcome. *Sankhya B*, **79**, 190-216.
72. Gao, F., **Zeng, D.** and Lin, D. Y. (2017). Semiparametric Estimation of the Accelerated Failure Time Model with Partly Interval-censored Data. *Biometrics*, **73**, 1161-1168.
73. Diao, G., **Zeng, D.**, Ibrahim, J., Rong, A., Lee, O., Zhang, K. and Chen, Q. (2017). Statistical Design of Non-Inferiority Multiple Region Clinical Trials to Assess Global and Consistent Treatment Effects. *Journal of Biopharmaceutical Statistics*, **27**, 933-944.
74. Tao, R., **Zeng, D.** and Lin, D. Y. (2017). Efficient Semiparametric Inference Under Two-Phase Sampling, With Applications to Genetic Association Studies. *Journal of the American Statistical Association*, **112**, 1468-1476.
75. **Zeng, D.**, Gao, F. and Lin, D. Y. (2017). Maximum Likelihood Estimation for Semiparametric Regression Models with Multivariate Interval-Censored Data. *Biometrika*, **104**, 505-525.
76. Song, R., Luo, S., **Zeng, D.**, Zhang, H. H., Lu, W. and Li, Z. (2017). Semiparametric Single-Index Model for Estimating Optimal Individualized Treatment Strategy. *Electronic Journal of Statistics*, **11**, 364-384.
77. Chen, H., **Zeng, D.**, and Wang, Y. (2017). Penalized Nonlinear Mixed Effects Model to Identify Biomarkers that Predict Disease Progression. *Biometrics*, **73**, 1343-1354.
78. Liu, Z., Song, R., **Zeng, D.** and Zhang, J. (2017). Principal Components Adjusted Variable Screening. *Computational Statistics and Data Analysis*, **110**, 134-144.
79. Mao, L., Lin, D. and **Zeng, D.** (2017). Semiparametric Regression Analysis of Interval-Censored Competing Risks Data. *Biometrics*, **73**, 857-865.
80. Deng, Y., **Zeng, D.**, Zhao, J. and Cai, J. (2017). Proportional Hazards Model with a Change Point for Clustered Event Data. *Biometrics*, **73**, 835-845.
81. Gao, F., Liu, G., **Zeng, D.**, Diao, G., Heysey, J. F. and Ibrahim, J. (2017). On Inference of Control-based Imputation for Analysis of Repeated Binary Outcomes with Missing Data. *Journal of Biopharmaceutical Statistics*, **27**, 358-372.
82. Liu, Y., Wang, Y., Wang, C. and **Zeng, D.** (2017). Estimating Personalized Diagnostic Rules Depending on Individualized Characteristics. *Statistics in Medicine*, **36**, 1099-1117.
83. Liu, Y., Wang, Y. and **Zeng, D.** (2017). Sequential Multiple Assignment Randomization Trials with Enrichment Design. *Biometrics*, **73**, 378-390.
84. Liang, B., Tong, X., **Zeng, D.**, and Wang, Y. (2017) Semiparametric Regression Analysis of Repeated Current Status Data. *Statistica Sinica*, **27**, 1079-1100.

85. Gao, F., Zeng, D., Wei, H., Wang, X., and Ibrahim, J. (2017). Estimating Treatment Effects for Recurrent Events in the Presence of Rescue Medications: An Application to the Immune Thrombocytopenia Study. *Statistics in Biosciences*, in press.
86. Chen, G., Zeng, D. and Kosorok, M. (2017). Personalized Dose Finding Using Outcome Weighted Learning (with discussion). *Journal of the American Statistical Association*, **111**, 1509-1521.
87. Kim, S., Zeng, D., and Taylor, J. (2017). Joint Partially Linear Model for Longitudinal Data with Informative Drop-Outs. *Biometrics*, **73**, 72-82.
88. Wang, Y., Wu, P., Liu, Y., Weng, C., and Zeng, D. (2016). Learning Optimal Individualized Treatment Rules from Electronic Health Records Data. *IEEE International Conference on Healthcare Informatics: ICHI 2016 Proceedings*: 65-71. DOI 10.1109/ICHI.2016.13
89. Wang, Y., Chen, T. and Zeng, D. (2016). Support Vector Hazards Machine: A Counting Process Framework for Learning Risk Scores for Censored Outcomes. *Journal of Machine Learning*, **17**, 1-37.
90. Ou, F., Zeng, D., and Cai, J. (2016). Quantile Regression Models for Current Status Data. *Journal of Statistical Planning and Inference*, **178**, 112-127.
91. Ni, A., Cai, J., and Zeng, D. (2016). Variable Selection for Case-Cohort Studies with Failure Time Outcome. *Biometrika*, **103**, 547-562.
92. Zeng, D., Mao, L. and Lin, D. Y. (2016). Maximum Likelihood Estimation for Semiparametric Transformation Models with Interval-Censored Data. *Biometrika*, **103**, 253-271.
93. Laber, E. B., Zhao, Y-Q., Regh, T., Davidian, M., Tsiatis, A. A., Stanford, J. B., Zeng, D., Song, R., and Kosorok, M. R. (2016). Using Pilot Data to Size A Two-Arm Randomized Trial to Find A Nearly Optimal Personalized Treatment Strategy. *Statistics in Medicine*, **35**, 1245-1256.
94. Chen, T., Zeng, D., Wang, Y. and the Alzheimers Disease Neuroimaging Initiative (2015). Multiple Kernel Learning with Random Effects for Predicting Longitudinal Outcomes and Data Integration. *Biometrics*, **71**, 918-928.
95. Wang, Y., Liang, B., Tong, X., Marder, K., Bressman, S., Orr-Urtreger, A., Giladi, N. and Zeng, D. (2015). Efficient Estimation of Nonparametric Genetic Risk Function with Censored Data. *Biometrika*, **102**, 515-532.
96. Zhu, R., Zeng, D. and Kosorok, M. (2015). Reinforcement Learning Trees. *Journal of the American Statistical Association*, **110**, 1770-1784.
97. Zeng, D., Gao, F., Hu, K., Jia, C. and Ibrahim, J. (2015). Hypothesis Testing for Two-Stage Designs with Over or Under Enrollment. *Statistics in Medicine*, **34**, 2417-2426.
98. Song, R., Kosorok, M., Zeng, D., Zhao, Y., Laber, E. and Yuan, M. (2015). On Sparse representation for Optimal Individualized Treatment Selection with Outcome Weighted Learning. *Stat*, **4**, 59-68.
99. Kim, E., Zeng, D. and Zhou, X. (2015). Semiparametric Transformation Models for Multiple Continuous Biomarkers in ROC Analysis. *Biometrical Journal*, **57**, 808-833.



100. Tao, R., Zeng, D., Franceschini, N., North, K., Boerwinkle, E., and Lin, D. Y. (2015). Analysis of Sequence Data Under Multivariate Trait-Dependent Sampling. *Journal of the American Statistical Association*, **110**, 560-572.
101. Zeng, D. and Lin, D. Y. (2015). On Random-Effects Meta-Analysis. *Biometrika*, **102**, 281-294.
102. Cao, H., Churpek, M., Zeng, D. and Fine, J. (2015). Analysis of the Proportional Hazards Model with Sparse Longitudinal Covariates. *Journal of the American Statistical Association*, **110**, 1187-1196.
103. Zhao, Y., Zeng, D., Laber, E., and Kosorok, M. (2015). New Statistical Learning Methods for Estimating Optimal Dynamic Treatment Regimes. *Journal of the American Statistical Association*, **110**, 583-598.
104. Cao, H., Zeng, D. and Fine, J. (2015). Regression Analysis of Sparse Asynchronous Longitudinal Data. *Journal of the Royal Statistical Society, Series B*, **77**, 755-776.
105. Song, R., Wang, W., Zeng, D. and Kosorok, M. (2015). Penalized Q-learning for Dynamic Treatment Regimens. *Statistica Sinica*, **25**, 901-920.
106. Zeng, D., Chen, M. H., Ibrahim, J. G., Wei, R., Ding, B., Ke, C. and Jiang, Q. (2015). A Counterfactual P-value Approach for Benefit-Risk Assessment in Clinical Trials. *Journal of Biopharmaceutical Statistics*, **25**, 508-524.
107. Choi, J., Cai, J., Zeng, D., and Olshan, A. F. (2015). Joint Analysis of Survival Time and Longitudinal Categorical Outcomes. *Statistics in Biosciences*, **7**, 19-47.
108. Chen, Q., Zeng, D., Ibrahim, J., Chen, M. H., Pan, Z., and Xue, X. (2015). Quantifying the Average of the Time-varying Hazard Ratio via a Class of Transformations. *Lifetime Data Analysis*, **21**, 259-279.
109. Zhao, Y., Zeng, D., Laber, E., Song, R., Yuan, M. and Kosorok, M. (2015). Doubly Robust Learning for Estimating Individualized Treatment with Censored Data. *Biometrika*, **102**, 151-168.
110. Yin, G., Zeng, D., and Li, H. (2014). Censored Quantile Regression with Varying Coefficients. *Statistica Sinica*, **24**, 855-570.
111. Zeng, D., Cornea, E., Dong, J., Pan, J. and Ibrahim, J. (2014). Assessing Temporal Agreement between Central and Local Progression-Free Survival Times. *Statistics in Medicine*, **34**, 844-858.
112. Chen, M-H., Ibrahim, J. G., Zeng, D., Hu, K., and Jia, C. (2014). Bayesian Design of Superiority Clinical Trials for Recurrent Events Data with Applications to Bleeding and Transfusion Events in Myelodysplastic Syndrome. *Biometrics*, **70**, 1003-1013.
113. Lin, D. Y., Tao, R., Kalsbeek, W., Zeng, D., and et al. (2014). Genetic Association Analysis Under Complex Survey Sampling: The Hispanic Community Health Study/Study of Latinos. *American Journal of Human Genetics*, **95**, 675-688.
114. Hu, W., Cai, J., and Zeng, D. (2014). Sample Size/Power Calculation for Stratified Case-cohort Design. *Statistics in Medicine*, **33**, 3973-3985.
115. Kim, E, Zhang, Z., Wang, Y., and Zeng, D. (2014). Power Calculation for Comparing Diagnostic Accuracies in a Multi-Reader, Multi-Test Design. *Biometrics*, **70**, 1033-1041.

116. Hu, Y., Lin, D.Y., Sun, W., and Zeng, D. (2014). A Likelihood-Based Framework for Association Analysis of Allele-Specific Copy Numbers. *Journal of the American Statistical Association*, **109**, 1533-1545.
117. Zeng, D. and Lin, D. (2014). Efficient Estimation of Semiparametric Transformation Models for Two-Phase Cohort Studies. *Journal of the American Statistical Association*, **109**, 371-383. PMC3960088
118. Chen, T., Wang, Y., Chen, H., Marder, K., and Zeng, D. (2014). Targeted Local Support Vector Machine for Age-Dependent Classification. *Journal of the American Statistical Association*, **109**, 1174-1187. PMC4183366
119. Agans, R., Jefferson, M., Bowling, M., Zeng, D., Young, J and Silverbush, M. (2014). Enumerating the Hidden Homeless: Strategies to Estimate the Homeless Gone Missing from a Point-in-time Count. *Journal of Official Statistics*, **30** 215-299.
120. Zhang, Y., Chu, H. and Zeng, D. (2014). Evaluation of Incomplete Multiple Diagnostic Tests, with an Application in the Colon Cancer Family Registry Study. *Journal of Applied Statistics*, **41** 688-700.
121. Liu, X. and Zeng, D.. (2013). Variable Selection in Semiparametric Transformation Models for Right Censored Data. *Biometrika*, **100**, 859-876.
122. Zeng, D., Ibrahim, J., Chen, M. H., Hu, K. and Jia, C. (2014). Multivariate Recurrent Events in the Presence of Multivariate Informative Censoring with Applications to Bleeding and Transfusion Events in Myelodysplastic Syndrome. *Journal of Biopharmaceutical Statistics*, **24** 429-442.
123. Zhou, H., Wang, X., Zeng, D., and Cai, J. (2014). Semiparametric Inference for Data with a Continuous Outcome from a Two-Phase Probability Sampling Scheme. *Journal of the Royal Statistical Society, Series B*, **76** 197-215.
124. Chen, M-H., Zhang, Y., Ibrahim, J., Zeng, D., Chen, Q., Pan, Z., and Xue, X. (2014). Bayesian Gamma Frailty Models for Survival Data with Semi-Competing Risks and Treatment Switching. *Lifetime Data Analysis*, **20** 76-105.
125. Diao, G., Zeng, D. and Yang, S. (2013). Efficient Semiparametric Estimation of Short-Term and Long-Term Hazard Ratios with Right-Censored Data. *Biometrics*, **69** 840-849.
126. Ding, K., Kosorok, M., and Zeng, D. (2013). On the Local and Stratified Likelihood Approaches in Single-Index Hazards Model. *Communication in Mathematics and Statistics*, **1** 115-132.
127. Lu, W., Zhang, H. H., and Zeng, D. (2013). Variable Selection for Optimal Treatment Decision. *Statistical Methods in Medical Research*, **22** 493-504.
128. Lin, D. Y., Zeng, D., and Tang, Z. (2013). Quantitative Trait Analysis in Sequencing Studies under Trait-dependent Sampling. *PNAS*, **110** 12247-12252.
129. Chen, Q., Zeng, D., Mouna, A., Heinz, S. and Ibrahim, J. (2013). Estimating Time-varying Effects for Overdispersed Recurrent Events Data with Treatment Switching. *Biometrika*, **100** 339-354.

130. Wang, Y., Chen, H., **Zeng, D.**, Mauro, C., Duan, N. and Shear, K. (2013). Auxiliary Marker-Assisted Classification in the Absence of Class Identifiers. *Journal of the American Statistical Association*, **108** 553-564.
131. Kim, E. and **Zeng, D.** (2013). Semiparametric ROC Analysis Using Accelerated Regression Models. *Statistica Sinica*, **23** 829-852.
132. Zhang, H., **Zeng, D.**, Olschwang, S., and Yu, K. (2013). Semiparametric inference on the penetrances of rare genetic mutations based on a case-family design. *Journal of Statistical Planning and Inference*, **143** 368-377.
133. Kim, S., **Zeng, D.**, Li, Y., Spiegelman, D. (2013). Joint Modeling for Longitudinal and Cure-Survival Data. *Journal of Statistical Theory and Practice*, **7** 324-344.
134. Kim, S., **Zeng, D.**, Chambless, L., and Li, Y. (2012). Joint Models of Longitudinal Data and Recurrent Events with Informative Terminal Event. *Statistics in Biosciences*, **4**, 262-281.
135. Zhao, Y., **Zeng, D.**, Rush, J. and Kosorok, M. (2012). Estimating Individualized Treatment Rules Using Outcome Weighted Learning. *Journal of the American Statistical Association*, **107** 1106-1118.
136. **Zeng, D.**, Chen, Q., Chen, M-H, Ibrahim, J. and Amgen Research Group (2012). Estimating Treatment Effects with Treatment Crossovers via Semi-Competing Risks Models: An Application to a Colorectal Cancer Study. *Biometrika*, **99** 167-184.
137. Chen, L., Lin, D. Y. and **Zeng, D.** (2012). Checking Semiparametric Transformation Models with Censored Data. *Biostatistics*, **13** 18-31.
138. Chen, L., Lin, D. Y., and **Zeng, D.** (2012). Predictive Accuracy of Covariates for Event Times. *Biometrika*, **99** 615-630.
139. **Zeng, D.**, Cai, J. and Schaubel, D. E. (2011). Semiparametric Transformation Rate Model for Recurrent Event Data. *Statistics in Biosciences*, **3** 187-207.
140. Lin, D. Y. and **Zeng, D.** (2011). Correcting for Population Stratification in Genomewide Association Studies. *Journal of the American Statistical Association*, **106** 997-1008.
141. Cai, J. and **Zeng, D.** (2011). Additive Mixed Effect Model for Clustered Failure Time Data. *Biometrics*, **67** 1340-1351.
142. Zhao, Y., **Zeng, D.**, Herring, A. H., Ising, A., Waller, A., Richardson, D., and Kosorok, M. (2011). Detecting Disease Outbreaks Using Local Spatiotemporal Methods. *Biometrics*, **67** 1508-1517.
143. Zhao, Y., **Zeng, D.**, Socinsky, M., and Kosorok, M. (2011). Reinforcement Learning Strategies for Clinical Trials in Non-Small Cell Lung Cancer. *Biometrics*, **67** 1422-1433 (Biopharmaceutical Section Poster Award Competition 3rd Place).
144. Pan, W. and **Zeng, D.** (2011). Estimating Mean Cost Using Auxiliary Covariates. *Biometrics*, **67** 996-1006.
145. Hu, Y., Lin, D. Y., and **Zeng, D.** (2010). A General Framework for Studying Genetic effects and Gene-Environment Interactions with Missing Data. *Biostatistics*, **11** 583-598.

146. Zeng, D. and Cai, J. (2010). Semiparametric Additive Rate Model for Recurrent Events with Informative Terminal Event. *Biometrika*, **97** 699-712.
147. Chen, L., Lin, D. Y., and Zeng, D. (2010). Attributable Fraction Functions for Censored Event Times. *Biometrika*, **97** 713-726.
148. Lin, D. Y. and Zeng, D. (2010). On the Relative Efficiency of Using Summary Statistics versus Individual Level Data in the Meta-Analysis. *Biometrika*, **97** 321-332.
149. Zeng, D. and Lin, D. Y. (2010). A General Asymptotic Theory for Maximum Likelihood Estimation in Semiparametric Regression Models With Censored Data. *Statistica Sinica*, **20** 871-910.
150. Zeng, D. and Chen, Q. (2010). Adjustment for Informative Missingness Using Auxiliary Information in Semiparametric Regression. *Biometrics*, **66** 115-122.
151. Zeng, D. and Cai, J. (2010). Additive Transformation Models for Clustered Failure Time Data. *Lifetime Data Analysis*, **16** 333-352.
152. Cai, J., Zeng, D., and Pan, W. (2010). Semiparametric Proportional Means Model for Marker Data Contingent on Recurrent Event. *Lifetime Data Analysis*, **16** 250-270.
153. Lin, D. Y. and Zeng, D. (2010). Meta-Analysis of Genome-Wide Association Studies: No Efficiency Gain in Using Individual Participant Data. *Genetic Epidemiology*, **34** 60-66.
154. Lin, D. Y. and Zeng, D. (2009). Proper Analysis of Secondary Phenotype Data in Case-Control Association Studies. *Genetic Epidemiology*, **33** 256-265.
155. Pan, W., Zeng, D., and Lin, X. (2009). Estimation in Semiparametric Transition Measurement Error Models for Longitudinal Data. *Biometrics*, **65** 728-736.
156. Zhao, Y., Kosorok, M. and Zeng D. (2009). Reinforcement Learning Design for Cancer Clinical Trials. *Statistics in Medicine*, **28** 3294-3315.
157. Zeng, D. and Lin, D. Y. (2009). Semiparametric Transformation Models with Random Effects for Joint Analysis of Recurrent and Terminal Events. *Biometrics*, **65** 746-752.
158. Zeng, D., Chen, Q. and Ibrahim, J. (2009). Gamma Frailty Transformation Models for Multivariate Survival Time. *Biometrika*, **96** 277-292.
159. Amorim, L., Cai, J., Zeng, D., and Barreto, M. (2008). Regression Splines in the Time-Dependent Coefficient Rates Model for Recurrent Event Data. *Statistics in Medicine*, **27** 5890-5906.
160. Chen, F. and Zeng, D. (2008). Nonparametric Estimation of Error Density in Censored Linear Regression. *Journal of Applied Probability and Statistics*, **3** 175-193.
161. Yin, G., Zeng, D. and Li, H. (2008). Power-Transformed Linear Quantile Regression with Censored Data. *Journal of the American Statistical Association*, **103** 1214-1224.
162. Yin, G., Li, H. and Zeng, D. (2008). Partially Linear Additive Hazards Regression with Varying Coefficients. *Journal of the American Statistical Association*, **103** 1200-1213.

163. Johnson, B., Lin, D. Y., and Zeng, D. (2008). Penalized Estimating Functions and Variable Selection in Semiparametric Regression Models. *Journal of the American Statistical Association*, **103** 272-280.
164. Zeng, D. and Lin, D.Y. (2008). Efficient Resampling Methods for Non-smooth Estimating Functions. *Biostatistics*, **9** 355-363.
165. Zeng, D., Lin, D.Y., and Lin, X. (2008). Semiparametric Transformation Models with Random Effects for Clustered Failure Time Data. *Statistica Sinica*, **18** 355-377.
166. Chen, Q., Zeng, D., and Ibrahim, J. (2007). Sieve Maximum Likelihood Estimation for Regression Models With Covariates Missing at Random. *Journal of the American Statistical Association*, **102** 1309-1317.
167. Zeng, D. and Lin, D.Y. (2007). Efficient Estimation in the Accelerated Failure Time Model. *Journal of the American Statistical Association*, **102** 1387-1396.
168. Cai, J. and Zeng, D. (2007). Case-Cohort Design for Non-Rare Disease. *Biometrics*, **63** 1288-1295.
169. Zeng, D. and Lin, D. Y. (2007). Maximum Likelihood Estimation in Semiparametric Models with Censored Data (With Discussion). *Journal of the Royal Statistical Society, Series B*, **69** 507-564.
170. Zeng, D. and Lin, D.Y. (2007). Semiparametric Transformation Models with Random Effects for Recurrent Events. *Journal of the American Statistical Association*, **102**, 167-180.
171. Schaubel, D.E., Zeng, D. and Cai, J. (2006). A Semiparametric Additive Rates Model for Recurrent Event Data. *Lifetime Data Analysis*, **12** 386-406.
172. Zeng, D. and Lin, D.Y. (2006). Maximum Likelihood Estimation in Semiparametric Transformation Models for Counting Processes. *Biometrika*, **93** 627-640.
173. Zeng, D., Lin, D.Y., Avery, C.L. and North, K.E. (2006). Efficient Semiparametric Estimation of Haplotype-disease Associations in Case-cohort and Nested Case-control Studies. *Biostatistics*, **7**, 486-502.
174. Pan, W., Lin X., and Zeng, D. (2006). Structural Inference in Transition Measurement Error Models for Longitudinal Data. *Biometrics*, **62** 402-412.
175. Zeng, D., Yin, G., and Ibrahim, J.G. (2006). Semiparametric Transformation Models for Survival Data with a Cure Fraction. *Journal of the American Statistical Association*, **101**, 670-684.
176. Lin, D.Y. and Zeng, D. (2006). Likelihood-Based Inference on Haplotype Effects in Genetic Association Studies (With Discussion). *Journal of the American Statistical Association*, **101**, 89-103.
177. Zeng, D., Cai, J., and Shen, Y. (2006). Semiparametric Additive Model for Interval Censored Data. *Statistica Sinica*, **16**, 287-302.
178. Yin, G. and Zeng, D. (2006). Efficient Algorithm for Computing Maximum Likelihood Estimates in Linear Transformation Models. *Journal of Computational and Graphic Statistics*, **15**, 228-245.

179. Lin, D., Zeng, D., and Millikan, B. (2005). Maximum Likelihood Estimation of Haplotype Effects and Haplotype-Environment Interactions in Association Studies. *Genetic Epidemiology*, **29**, 299-312.
180. Zeng, D. and Cai, J. (2005). Asymptotic Results for Maximum Likelihood Estimates in Joint Analysis of Repeated Measurements and Survival Time. *The Annals of Statistics*, **33**, 2132-2163.
181. Zeng, D. and Cai, J. (2005). Simultaneous Modeling of Quality of Life and Survival Time. *Lifetime Data Analysis*, **11**, 151-174.
182. Zeng, D., Yin, G., and Ibrahim, J.G. (2005). Inference for a Class of Transformed Hazards Models. *Journal of the American Statistical Association*, **100**, 1000-1008.
183. Zeng, D., Lin, D.Y., and Yin, G. (2005). Maximum Likelihood Estimation in Proportional Odds Model with Random Effects. *Journal of the American Statistical Association*, **100**, 470-483.
184. Zeng, D. (2005). Likelihood Approach for Marginal Proportional Hazards Regression in the Presence of Dependent Censoring. *The Annals of Statistics*, **33**, 501-521.
185. Zeng, D. and Lin, D.Y. (2005). Estimating Haplotype-disease Associations with Pooled Genotype Data. *Genetic Epidemiology*, **28**, 70-82.
186. Yin, G. and Zeng, D. (2005). Pair Chart Test for an Early Survival Difference. *Lifetime Data Analysis*, **11**, 117-129.
187. Zeng, D. (2004). Estimating Marginal Survival Function by Adjusting for Dependent Censoring Using Many Covariates. *The Annals of Statistics*, **32**, 1533-1555.
188. Cai, J. and Zeng, D. (2004). Power and Sample Size in Case-Cohort Study. *Biometrics*, **60**, 1015-1024.

#### PEER REVIEWED PUBLICATIONS (COLLABORATIVE PART)

1. Seligowski A. ... , Zeng, D., ..., and Jovanovic, T. (2021). A prospective examination of sex differences in posttraumatic autonomic functioning. *Neurobiology of Stress*, in press.
2. Marquine, M.J., Gallo, L.C., Tarraf, W., Wu, B, Moore, A.A., Vásquez, P.M., Talavera, G., Allison, M., Muñoz, E., Isasi, C.R., Perreira, K.M., Bigornia, S.J., Daviglius, M., Estrella, M.L., Zeng, D. & González, H.M. (2021). The association of stress, metabolic syndrome and systemic inflammation with neurocognitive function in the Hispanic Community Health Study/Study of Latinos and its Sociocultural Ancillary Study. *The Journal of Gerontology: Psychological Sciences*, in press.
3. Steuber, E., ....., Zeng, D., ..., and Stevens, J. (2021). Thalamic Volume and Fear Extinction Interact to Predict Acute Posttraumatic Stress Severity. *Journal of Psychiatric Research*, in press.
4. Zhu, Y., Chiang, C., Wang, L., Borck, G., Miks, M., Cao, W., Zheng, P., Zeng, D., Donneyong, M, and Li, L. (2021). A Multi-State Transition Model for Statin-Induced Myopathy and Statin Discontinuation. *CPT: Pharmacometrics & Systems Pharmacology*, in press.
5. Ziobrowski, HN, ..., Zeng D., ..., McLean, S., and Kessler, R. (2021). Development and validation of a model to predict posttraumatic stress disorder and major depression three months after a motor vehicle collision. *JAMA Psychiatry*, in press.

6. Argos, M., Scannell, M., ..., **Zeng, D.**, and Daviglius, M. (2021). Mendelian randomization analysis of arsenic metabolism and pulmonary function within the Hispanic Community Health Study/Study of Latinos. *Scientific Reports*, in press.
7. Stevens JS, ... **Zeng, D.**, ... , Koenen, K, McLean, S., and Ressler, K. (2021) Brain-based biotypes of psychiatric vulnerability in the acute aftermath of trauma. *American Journal of Psychiatry*, in press.
8. Zatar, Z.Z., Tarraf, W., González, K.A., .....,**Zeng, D.**, ..., and González, H.M. (2021). Subjective cognitive decline and objective cognition among diverse U.S. Hispanics/Latinos: Results from the Study of Latinos-Investigation of Neurocognitive Aging (SOL-INCA). *Alzheimer's & Dementia*, in press.
9. Beaudoin, F., Kessler, R., Hwang, I., Lee, S., Sampson, N., An, X., Ressler, K., Koenen KC, McLean, S., Stevens, J., **Zeng, D.**, and etc. (2021). Pain after a motor vehicle crash: The role of socio-demographics, crash characteristics, and peri-traumatic stress symptoms. *European Journal of Pain*, in press.
10. Harnett, N., ....., **Zeng, D.**, ..., Ressler, K., and Stevens, J. (2021). NPRC-Prognostic neuroimaging biomarkers of trauma-related psychopathology: Resting state fMRI shortly after trauma predicts future PTSD and depression symptoms in the AURORA study. *Neuropsychopharmacology*, in press.
11. Stickell, A., Tarraf, W., Bainbridge, K., Viviano, R., Daviglius, M., Dhar, S., Gonzalez, F., **Zeng, D.**, and Gonzalez, H. (2021). Hearing sensitivity, cardiovascular risk, and neurocognitive function: Hispanic Community Health Study/Study of Latinos (HCHS/SOL). *JAMA Otolaryngology-Head & Neck Surgery*, in press.
12. Joormann, J., McLean, S.A., Beaudoin, F.L., An, X., Stevens, J.S., **Zeng, D.**, ..., and Kessler, R. (2021). Socio-demographic and trauma-related predictors of depression within eight weeks of motor vehicle collision in the AURORA study. *Psychological Medicine*, in press.
13. Thomas, N., Kessler, R., Ressler, K., Clifford, G., Beaudoin, F., An, X., Stevens, J., **Zeng, D.**, ... and McLean, S. (2021). Prior sleep problems and adverse post-traumatic neuropsychiatric sequelae (APNS) of motor vehicle collision in the AURORA study. *SLEEP*, in press.
14. Granot-HersHKovitz, E., Tarrfaf,W., ..., **Zeng, D.**, ..., Gonzalez, H., and Sofer, M. (2021). APOE alleles association with cognitive function differs across Hispanic/Latino groups and genetic ancestry in the Study of Latinos-Investigation of Neurocognitive Aging (HCHS/SOL). *Alzheimer's & Dementia: The Journal of the Alzheimer's Association*, in press.
15. Kessler, R. C., Ressler, K. J., House, S., Beaudoin, F., An, X., Stevens, J., **Zeng, D.**, ..., and McLean, S. (2021). Socio-demographic and trauma-related predictors of PTSD within eight weeks of a motor vehicle collision in the AURORA study. *Molecular Psychiatry*, in press.
16. Estrella, M., ..., **Zeng, D.**, ... (2021). Psychosocial Factors Associated with Cognitive Function among Middle-Aged and Older Hispanics/Latinos: The Hispanic Community Health Study/Study of Latinos and its Sociocultural Ancillary Study. *Journal of Alzheimer's Diseases*, **79**, 433-449.
17. Ilango, S., Gonzalez, K., ..., **Zeng, D.**, Mortamais, M., Gonzalez, H., and Benmarhnia, T. (2020). Long-term exposure to ambient air pollution and cognitive function among Hispanic/Latino adults in San Diego, California. *Journal of Alzheimer's Diseases*, **79**, 1489-1496.

18. Stickel, A., Tarraf, W., Wu, B., Marquine, M., Vasquez, P., Daviglus, M., Estrella, M., Perriera, K., Gallo, L., Lipton, R., Isasi, C., Kaplan, R., **Zeng, D.**, Schneiderman, N., and Gonzalez, H. (2020). Cognition and daily functioning: Results from the Hispanic Community Health Study/Study of Latinos (SOL) and Study of Latinos - Investigation of Neurocognitive Aging (SOL-INCA). *Journal of Alzheimer's Disease*, **77**, 1267-1278.
19. Fornage, M., Jian, X., Sofer, T., Tarraf, W., Bressler, J. Faul, J., Zhao, W., Ratliff, S., Lamar, M., Launer, L., Laurie, C., Chneiderman, N., Weir, D., Wright, C., Yaffe, K., **Zeng, D.**, Decarli, C., Mosley, T., Smith, J., and Gonzalez, H. (2020). Genome-wide association study of cognitive function in diverse Hispanics/ Latinos: Results from the Hispanic Community Health Study / Study of Latinos. *Translational Psychiatry*, **10**, 245.
20. Kats, D., Evenson, K., **Zeng, D.**, Avery, C., Palta, P., Kritshevsky, S., and Heiss, G. (2020). Leisure-time physical activity volume, intensity, and duration from mid- to late-life in U.S. sub-populations by race and sex. The Atherosclerosis Risk in Communities (ARIC) Study. *Aging*, **19**, 11.
21. Poon, A. K., Meyer, M., Tanaka, H., Selvin, E., Pankow, J., **Zeng, D.**, Loehr, L., Knowles, J., Rosamond, W., and Heiss, G. (2020). Association of Insulin Resistance, from Mid-Life to Late-Life, with Aortic Stiffness in Late-Life: The Atherosclerosis Risk in Communities Study. *Cardiovascular Diabetology*, in press.
22. Shelton, S., Stone, J., Gao, F., **Zeng, D.**, and Dayton, P. (2020). Microvascular Ultrasonic Imaging of Angiogenesis Identifies Tumors in a Murine Spontaneous Breast Cancer Model. *International Journal of Biomedical Imaging*, e862089.
23. Kallwitz, E., Tayo, B., Kuniholm, M., Daviglus, M., **Zeng, D.**, Isasi, C., and Cotler, S. (2020). Association of HSD17B13 rs72613567:TA with non-alcoholic fatty liver disease in Hispanics/Latinos. *Liver International*, **40**, 889-893.
24. Love, S., North, K., **Zeng, D.**, Petruski-Ivleva, N., Kucharska-Newton, A., Palta, P., Graff, M., Loehr, L., Jones, S., and Heiss, G. (2020). Nine-year Ethanol Intake Trajectories and Their Association With 15-year Cognitive Decline Among African-American and White Adults: The Atherosclerosis Risk in Communities Neurocognitive Study. *American Journal of Epidemiology*, **189**, 788-800.
25. McLean, S., Ressler, K., Koenen, K., Neylan, T., Germine, L., Jovanovic, T., Clifford, G., **Zeng, D.**, and et al. (2020). The AURORA Study: A Longitudinal, Multimodal Library of Brain Biology and Function after Traumatic Stress Exposure. *Molecular Psychiatry*, **25**, 283-296.
26. Gellert, K., Keil, A., **Zeng, D.**, Lesko, C., Aubert, R., Avery, C., Lutsey, P., Windham, G., Siega-Riz, A. and Heiss, G. (2020). Reducing the population burden of coronary heart disease by modifying adiposity: Estimates from the Atherosclerosis Risk in Communities (AIRC) Study. *Journal of the American Heart Association*, **9**, e012214.
27. Perez, H., Starrels, J., Gonzalez, S., Vidot, D., Hua, S., Strizich, G., **Zeng, D.**, Daviglus, M., Gellman, M. and Kaplan, R. (2020). Prescription opioid use among Hispanics/Latinos with arthritis symptoms: Results from the Hispanic Community Health Study/Study of Latinos. *Hispanic Health Care International*, **18**, 12-19.



28. Fajgenbaum, K., Crouse, L., Dong, L., **Zeng, D.** and Sayed, C. (2020). Intralesional Triamcinolone May Not Be Beneficial for Treating Acute Hidradenitis Suppurativa Lesions A Double-Blind, Randomized, Placebo-Controlled Trial. *Dermatologic Surgery*, **46**, 685-689.
29. Ramos, A., Tarraf, W., Cai, J., Daviglius, M., Gallo, L., Mossavar-Rahmani, Y., Perreira, K., Redline, S., Zee, P., **Zeng, D.**, and Gaonzalez, H. (2019). Sleep and Neurocognitive Decline in the Hispanic Community Health Study / Study of Latinos. *The Journal of the Alzheimer's Association*, pii: S1552-5260.
30. Vasquez, P., Tarraf, W., Dozab, A., Marquinec, M., Perreirad, K., Schneidermance, N., **Zeng, D.**, Cai, J., Isasig, C., Daviglush, M., and Gonzalez, H. (2019). The cross-sectional association of cognitive stimulation factors and cognitive function among Latino adults in Hispanic Community Health Study/Study of Latinos (HCHS/SOL). *Alzheimer's & Dementia: Translational Research & Clinical Interventions*, **5**, 533-541.
31. Gonzalez, H., Tarraf, W., Fornage, M., Gonzalez, K., Chai, A., Youngblood, M., Abreu, M., **Zeng, D.**, Thomas, S., Talavera, G., Gallo, L., Kaplan, R., Daviglius, M. and Schneiderman, N. (2019). A research framework for cognitive aging and Alzheimer's disease among diverse US Latinos: Design and implementation of the Hispanic Community Health Study/Study of Latinos' Investigation of Neurocognitive Aging (SOL-INCA). *The Journal of the Alzheimer's Association*, **15**, 1624-1632.
32. Joyce, B., Wu, D., ..., **Zeng, D.**, Mattei, J., Corsino, L., and Daviglius, M. (2019). DASH diet and prevalent metabolic syndrome in the Hispanic Community Health Study/Study of Latinos. *Preventive Medicine Reports*, **15**: 100950.
33. Bravin, J., Gutierrez, A., ..., **Zeng, D.**, Gallo, L. (2019). Extra-familial social factors and obesity in the Hispanic Community Children's Health Study/Study of Latino Youth. *Journal of Behavior Medicine*, **42**, 947-959.
34. Palace, J., Lin, D., **Zeng, D.**, Majed, M., Elson, L., Hamid, S., ..., Pittock, S. (2019). Outcome Prediction Models in AQP4-IgG Positive Neuromyelitis Optica Spectrum Disorders: Tools for Clinical Practice and Drug Trial Design. *Brain*, **142**, 1310-1323.
35. Lee, Y., Puett, C., Inscoe, C., Jia, B., Kim, C., Walsh, R., Yoon, S., Kim, S., Kuzmiak, C., **Zeng, D.**, Lu, J., and Zhou, O. (2019). Initial Clinical Experience with Stationary Digital Breast Tomosynthesis. *Academic Radiology*, **26**, 1363-1372.
36. Melin, K., Moon, J., Qi, B., Hernandez, D., Duconge, J., Hua, S., Gonzalez, S., **Zeng, D.**, and Kaplan, R. (2019). Prevalence of Pharmacogenomics Variants Affecting the Efficacy of Clopidogrel Therapy in the HCHS/SOL Cohort. *Pharmacogenomics*, **20**, 75-83.
37. Mehta R, Cai X, Hodakowski A, Thyagarajan B, **Zeng D.**, Zee PC, Wohlgemuth W, Redline S, Lash JP, Wolf M, Isakova T. (2018) Sleep Disordered Breathing and Fibroblast Growth Factor 23 in the Hispanic Community Health Study / Study of Latinos (HCHS/SOL). *Bone*, **114**, 278-284.
38. Hardy, S., **Zeng, D.**, Kshirsagar, A., Viera, A., Avery, C. and Heiss, G. (2018). Primary Prevention of Chronic Kidney Disease Through Population-Based Strategies for Blood Pressure Control: The ARIC Study. *Journal of Clinical Hypertension*, **20**, 1018-1026.

39. Hernandez, R., Carnethon, M., Giachello, A. L., Penedo, F. J., Wu, D., Birnbaum-Weitzman, O., Giacinto, R., Gallo, L. C., Isasi, C. R., Schneiderman, N., Teng, Y., **Zeng, D.**, and Daviglius, M. L. (2018). Structural Social Support and Cardiovascular Disease Risk Factors in Hispanic/Latino Adults with Diabetes: Results from the Hispanic Community Health Study/Study of Latinos (HCHS/SOL). *Ethnicity and Health*, **23**, 737-751.
40. Jung, H. K., Kuzmiak, C., Kim, K., Choi, N., Kim, H., Langman, E., Yoon, S., Steen, D., **Zeng, D.**, and Gao, F. (2017). Potential Use of American College of Radiology BI-RADS Mammography Atlas for Reporting and Assessing Lesions Detected on Dedicated Breast CT Imaging: Preliminary Study. *Academic Radiology*, **24**, 1395-1401.
41. Guduru, A. , Fleischman, D. , Shin, S., **Zeng, D.**, Baldwin, J., Houghton, O., and Say, E. (2017). Ultra-Widefield Fundus Autofluorescence in Age-Related Macular Degeneration. *PLOS ONE*, **12** (6):e0177207.
42. Bulka, C., Daviglius, M., Persky, V., Durazo-Arvizu, R., Aviles-Santa, L., Gallo, L., Hosgood, D., Singer, R., Talavera, G., Thyagarajan, B., **Zeng D.**, Argos, M. (2017). Occupational Exposures and Metabolic Syndrome among Hispanics/Latinos: Cross-Sectional Results from the Hispanic Community Health Study/Study of Latinos (HCHS/SOL). *Journal of Occupational and Environmental Medicine*, **59**, 1047-1055.
43. Hardy, S., Holliday, K., Chakladar, S., Engeda, J., Allen, N., Heiss, G., Llyod-Jones, D., Schreiner, P., Shay, M., Lin, D., **Zeng, D.** and Avery, C. (2017). Heterogeneity in Blood Pressure Transitions Over the Life Course: Age-Specific Emergence of Racial/Ethnic and Sex Disparities in the United States. *JAMA Cardiology*, **2**, 653-661.
44. Byrne, C., Ursin, G., Martin, C., Peck, J., Cole, E., **Zeng, D.**, Kim, E., Yaffe, M., Boyd, N., Heiss, G., McTiernan, A. Chlebowski, R., Lane, D., Manson, J., Wactawski-Wende, J., and Pisano, E. (2017). Mammographic Density Change with Estrogen and Progestin Therapy and Breast Cancer Risk. *Journal of the National Cancer Institute*, **109**.
45. Cui, Z. Stevens, J., Truesdale K., **Zeng, D.**, French, S. and Gordon-Larsen, P. (2016). Prediction of Body Mass Index Using Concurrently Self-reported or Previously Measured Height and Weight. *PLOS ONE*, **11**, e0167288.
46. Avery, C., Holliday, K., Chakladar, S., Engeda, J., Hardy, S., Reis, J., Schreiner, P., Shay, C., Daviglius, M., Heiss, G., Lin, D. Y. and **Zeng, D.** (2016). Disparities in Early Transitions to Obesity in Contemporary Multi-ethnic U.S. Populations. *PLOS ONE*, **11**, e0158025.
47. Holliday, K., Lin, D., Chakladar, S., Castañeda, S., Daviglius, M., Evenson, K., Marquez, D., Qi, Q., Shay C., Sotres-Alvarez, D., Vidot, D., **Zeng, D.**, Avery, C. (2017). Targeting Physical Activity Interventions for Adults: When do we need to intervene? *Preventive Medicine*, **97**, 13-18.
48. Kuzmiak, C., Cole, E., **Zeng, D.**, Tuttle, L., Steed, D. and Pisano, E. (2016). Dedicated Three-dimensional Breast Computed Tomography: Lesion Characteristic Perception by Radiologists. *Journal of Clinical Imaging Science*, **6**, 1-14.
49. Stevens, J., Truesdale, K. P., Ou, F. **Zeng, D.**, Vaughn, A. E., Pratt, C., and Ward, D. (2015). Methodology for Imputation of Missing Dietary Data for Young Children in Child Care. *Food and Nutrition Research*, **59**, 1654-1661.

50. Kuzmiak, C. M., Ko, E. Y., Tuttle, L. A., Steed, D., **Zeng, D.**, and Yoon, S. (2015). Whole Breast Ultrasound: Comparison of the Visibility of Suspicious Lesions with Automated Breast Volumetric Scanning versus Hand-Held Breast Ultrasound. *Academic Radiology*, **22**, 870-879.
51. Roshdy, D., Tran, A., Lecroy, N., **Zeng, D.**, Ou, F., Daniels, L., Weber, D., Alby, K., and Miller, M. (2015). Impact of A Rapid Microarray Assay for Identification of Positive Blood Cultures on Treatment Optimization for Patients with Streptococcal and Enterococcal Bacteremia. *Journal of Clinical Microbiology*, **53**, 1411-1414.
52. Zhao, J., Zhu, Y., Hyun, N., **Zeng, D.**, et al. (2015). Novel Metabolic Markers for the Risk of Diabetes Development in American Indians. *Diabetes Care*, **38**, 220-227.
53. Tucker, A., Calliste, J., Gidcumb, E., Wu, J., Kuzmiak, C., Hyun, N., **Zeng, D.**, Lu, J., Zhou, O., Lee, YZ. (2014) Comparison of a Stationary Digital Breast Tomosynthesis System to Magnified 2D Mammography Using Breast Tissue Specimens. *Academic Radiology*, **21**, 1547-1552. PMID: 25172412
54. Kuzmiak, C., Lewis, M., **Zeng, D.**, and Liu, X. (2014). The Role of Sonography in the Differentiation of Benign, High-Risk, and Malignant Papillary Lesions of the Breast. *Journal of Ultrasound in Medicine*, **33**, 1545-1552.
55. Hodgson, M., Poole, C., Olshan, A., North, K., **Zeng, D.**, and Millikan, R. (2012). The case-only independence assumption: Associations between genetic polymorphisms and smoking among controls in two population-based studies. *International Journal of Molecular Epidemiology and Genetics*, **3** 333-360.
56. Hodgson, M., Poole, C., Olshan, A., North, K., **Zeng, D.**, and Millikan, R. (2010). Smoking and Selected DNA Repair Gene Polymorphisms in Controls: Systematic Review and Meta-Analysis. *Cancer Epidemiology Biomarker Prev.* **19** 3055-3086.
57. Kuzmiak, C., Cole, E., **Zeng, D.**, Kim, E., and et al. (2010). Comparison of Image Acquisition and Radiologist Interpretation Times in a Diagnostic Mammography Center. *Academic Radiology*, **17** 1168-1174.
58. Faulconer L, Parham CA, Connor DM, Kuzmiak C, Koomen M, LeeY, Cho KY, Rafoth J, Livasy CA, Kim E, **Zeng D.**, Cole E, Zhong Z, and Pisano ED. (2010). Effect of Breast Compression on Lesion Characteristic Visibility with Diffraction-Enhanced Imaging. *Academic Radiology*, **17** 433-440.
59. Bullitt, E., **Zeng, D.**, Mortamet, B., Ghosh, A., Stephen, R. A., Marks, B. L., and Smith, K. (2010). The Effects of Healthy Aging on Intracranial Blood Vessels Visualized by Magnetic Resonance Angiography. *Neurobiology of Aging*, **31** 290-300.
60. Faulconer, L.S., Parham, C., Connor, D.M., Zhong, Z., Kim, E., **Zeng, D.**, Livasy, C.A., Cole, E., Kuzmiak, C., Koomen, M., Pavic, D., Pisano, E. (2009). Radiologist Evaluation of An X-Ray Tube-Based Diffraction-Enhanced Imaging Prototype Using Full-Thickness Breast Specimens. *Academic Radiology*, **16** 1329-1337.
61. Bullitt, E., Rahman, F.N., Smith, J. K., Kim E., **Zeng, D.**, Katz, L. Z., Marks, B. L. (2009). The Effect of Exercise on the Cerebral Vasculature of Healthy Aged Subjects as Visualized by Magnetic Resonance Angiography. *American Journal of Neuroradiology*, **30** 857-1863.

62. Kuzmiak, C. M., **Zeng, D.**, Cole, E., and Pisaono, E. (2009). Mammographic Findings of Partial Breast Irradiation vs. Whole Breast Irradiation in Patients Who Underwent a Segmental Mastectomy for Invasive Ductal Carcinoma. *Academic Radiology*, **16** 819-825.
63. Bullitt, E., Ewend, M., Vredenburgh, J., Friedman, A., Lin, W., Wilber, K., **Zeng, D.**, Aylward, SR., Reardon, D. (2009). Computerized Assessment of Vessel Morphological Changes during Treatment of Glioblastoma Multiforme: Report of A Case Imaged Serially by MRA over Four Years. *NeuroImaging*, **47** 143-151.
64. Kuzmiak CM, Haberle S, Padungchaichote W, **Zeng D.**, Cole E, Pisano ED. (2008). Insurance Status and The Severity of Breast Cancer at The Time of Diagnosis. *Academic Radiology*, **15** 1255-1258.
65. Budin, F., **Zeng, D.**, Ghosh, A., and Bullitt, E. (2008) Preventing Facial Recognition When Rendering MR Images of the Head in Three Dimensions. *Medical Image Analysis*, **12**, 229-239.
66. Pollitt, R.A., Kaufman, J.S., Rose, K.M., Diez-Roux, A. V., **Zeng, D.**, and Heiss, G. (2008). Cumulative Life-course and Adult Socioeconomic Status and Levels of Inflammatory Risk Markers in Adulthood: The Life Course Socioeconomic Status, Social Context, and Cardiovascular Disease Study. *Journal of Epidemiology and Community Health*, **62**, 484-491.
67. Bullitt, E., Lin, D.U., Smith, K., **Zeng, D.**, Winer, E. P., Carey, L. A., Lin, W., and Ewend, M.G. (2007). Blood Vessel Morphological Changes as Visualized by MRA During Treatment of Brain Metastases. *Radiology*, **245**, 824-830 (shown in the front cover of the December issue of *Radiology*).
68. Richard Kwork, K., Medola, P., Liu, Z. Y., Savitz, D. A., Heiss, G., He, L.L., Xia, Y., Lobdell, D. T., **Zeng, D.**, Thorp, J. M., Creason, J. P., and Mumford<sup>1</sup>, J. L. (2007). Drinking Water Arsenic Exposure and Blood Pressure In Healthy Women Of Reproductive Age In Inner Mongolia, China. *Toxicology and Applied Pharmacology*, **222**, 337-343.
69. Shoham, D., Kaufman, J.S., Vuputuri, S., Kshirsagar, A. V., **Zeng, D.**, Diez-Roux, A., Corsh, J., and Heiss, G. (2007). Kidney Disease in Life-Course Socioeconomic Context: The Atherosclerosis Risk in Communities (ARIC) Study. *American Journal of Kidney Diseases*, **49**, 217-226.
70. Pollitt, R.A., Kaufman, J.S., Rose, K.M., Diez-Roux, A. V., **Zeng, D.**, and Heiss, G. (2007). Early-Life and Adult Socioeconomic Status and Inflammatory Risk Markers in Adulthood. *European Journal of Epidemiology*, **22**, 55-66.
71. Lange, L. A., Carlson, C.S., Hindorff, L.A., Lange, E.M., Walston, J., Peter Durda, J. Cushman, M., Bis, J.C, **Zeng, D.**, Lin, D. Y., Kuller, L. H., Nickerson, D. A., Psaty, B. M., Tracy, R. P., and Reiner, A. P. (2006). Polymorphisms in the CRP Gene Are Associated with Circulating C-Reactive Protein Levels and Cardiovascular Events: the Cardiovascular Heath Study. *Journal of the American Medical Association*, **296**, 2703-2711.
72. Bullitt E., Lin N.U., Ewend M.G., **Zeng D.**, Winer, E., Carey, L., and Smith, K. (2006). Tumor Therapeutic Response and Vessel Tortuosity: Preliminary Report in Metastatic Breast Cancer. *Lecture Notes in Computer Science*, **4191**, 561-568.
73. Cole, E.B., Clary, C., Pisano, E.D., **Zeng, D.**, Koomen, M., Kuzmiak, M., Seo, B. K., Lee, Y., and Pavic, D. (2006). A Comparative Study of Mobile Electronic Data Entry Systems for Clinical Trials Data Collection. *International Journal of Medical Informatics*, **75**, 722-729..

74. Kuzmiak, C.M., Dancel, R., Pisano, E.D., **Zeng, D.**, Cole, E., Koomen, M. A., and McLelland, R. (2006). Consensus Review: A Method of Assessment of Calcifications That Appropriately Undergo a Six-Month Follow-up. *Academic Radiology*, **13**, 621-629.
75. Bullitt, E., Wolthousen, A. Brubaker, L. Lin, W., **Zeng, D.**, and Van Dyke, T. (2006) Malignancy-Associated Vessel Tortuosity: A Computer-Assisted, MRA Study of Choroid Plexus Carcinoma in Genetically Engineered Mice. *American Journal of Neuroradiology*, **27**, 612-619.
76. Kuzmiak, C.M., Pisano, E.D., Cole, E.B., Johnson, R.E., and **Zeng, D.**, Burns, C. B., Roberto, C., Pavic, D., Lee, Y., Seo, B. K., Koomen, M., and Washburn, D. (2005). Comparison of Full-Field Digital Mammography to Screen-Film Mammography with Respect to Contrast and Spatial Resolution in Tissue Equivalent Breast Phantoms. *Medical Physics*, **32**, 3144-3150.
77. Mortamet, B., **Zeng, D.**, Gerig, G., Prastawa, M., and Bullitt, E. (2005). Effects of Healthy Aging Measured By Intracranial Compartment Volumes Using a Designed MR Brain Database. *Lecture Notes in Computer Science*, **3749**, 383-391.
78. Bullitt, E., **Zeng, D.**, Gerig, G., Aylward, S., Joshi, S., Smith, J. K., Lin, W., and Ewend, M. G. (2005). Vessel Tortuosity and Brain Tumor Malignancy: A Blinded Study. *Academic Radiology*, **12**, 1232-1240. (**Recipient of the 2006 Herbert M. Stauffer Award for Best Clinical Paper 2005 by the Association of University Radiologists**).
79. Wohl, D., **Zeng, D.**, Stewart, P., Glomb, N., Alcorn, T., Jones, S., Handy, J., Fiscus, S., Weinberg, A., Gowda, D., and van der Horst, C. (2005). Cytomegalovirus Viremia, Mortality and CMV End-Organ Disease Among Patients with AIDS Receiving Potent Antiretroviral Therapies. *Journal of AIDS*, **38**, 538-544.
80. Cole, E.B., Pisano, E.D., **Zeng, D.**, Muller, K., Aylward, S. R., Park, S., Kuzmiak, C., Koomen, M., Pavic, D., Walsh, R., Baker, J., Gimenez, E. I., and Freimanis, R. (2005). The Effects of Grey Scale Image Processing on Digital Mammography Interpretation Performance. *Academic Radiology*, **12**, 585-595.
81. Abrams, T., Milner, D, Kwiek, J., Mwapasa, V., Kamwendo, D., **Zeng, D.** Tadesse, E., Lema, V. M., Molyneux, M. E., Rogersonm, S. J., and Meshnick, S.R. (2004). Risk Factors and Mechanisms of Preterm Delivery in Malawi. *American Journal of Reproductive Immunology*, **52**, 174-183.
82. Murray, M., Meyer, W., Zaino, R., Lessey, B., Novotny, D., Ireland, K., **Zeng, D.**, and Fritz, M. (2004). A Critical Reanalysis of the Accuracy, Reproducibility, and Clinical Utility of Histologic Endometrial Dating: A Systematic Study of the Secretory Phase in Normally Cycling, Fertile Women. *Fertility and Sterility*, **81**, 1333-1343.
83. Lin, G. and **Zeng, D.** (1999). Spatial Clusters of Diseases: Remodeling the Concept. *Geographic Information Sciences*, **5**, 175-180.

## BOOK CHAPTERS

1. Chen, Y., Liu, Y., **Zeng, D.** and Wang, Y. (2020). Statistical Learning Methods for Optimizing Dynamic Treatment Regimes in Subgroup Analysis. *Design and Analysis of Subgroups with Biopharmaceutical Applications*, edited by Ting, D., Cappelleri, J., Ho, S. and Chen, D., Springer.

2. Zeng, D. and Lin, D. (2018). Maximum Likelihood Estimation for Case-Cohort and Nested Case-Control Studies. *Handbook of Statistical Methods for Case-Control Studies*, edited by Borgan, O., Breslow, N., Chatterjee, N., Gail, M. Scott, A. ad Wild, C. Chapman & Hall/CRC.
3. Diao, G., Zeng, D. and Lin, D. (2018). Analysis of Secondary Phenotype under Case-Control Design. *Handbook of Statistical Methods for Case-Control Studies*, edited by Borgan, O., Breslow, N., Chatterjee, N., Gail, M. Scott, A. ad Wild, C. Chapman & Hall/CRC.
4. Chen, G. and Zeng, D. (2016). Clinical Trials for Personalized Dose Finding. *Adaptive Treatment Strategies in Practice*. Edited by M. Kosorok and E. Moodie. Series: ASA-SIAM Series on Statistics and Applied Mathematics.
5. Cai, J., Zeng, D. and Deng, Y. (2015). Cox Proportional Hazard Model. *Methods and Applications of Statistics in Clinical Trials, Volume 2: Planning, Analysis, and Inferential Methods*.
6. Guo, S. and Zeng, D. (2014). An Overview of Semiparametric Models in Survival Analysis Journal of Statistical Planning and Inference. *Journal of Statistical Planning and Inference*, **151**, 1-16.
7. Zhang, Y., Chen, Q., Chen, M-H., Ibrahim, J., Zeng, D., Pan, Z. and Xue, X. (2013). Bayesian Analysis of Survival Data with Semi-Competing Risks and Treatment Switching. *International Chinese Statistical Association 2012 Proceeding*: Springer.
8. Zhao, YQ. and Zeng, D. (2013). Recent Development on Statistical Methods for Personalized Medicine Discovery. *Frontiers of Medicine*: Springer-Verlag.
9. Amorim, L., Cai, J. and Zeng, D. (2010). Proportional Rate Models for Recurrent Time Event Data under Dependent Censoring: A Comparative Study. *Recent Advances in Biostatistics: False Discovery, Survival Analysis and Other Topics*.
10. Zeng, D. and Yu, D. (2009). Kernel Estimation in Longitudinal Data with Outcome-Related Observation Times. *Frontiers of Biostatistics and Bioinformatics*: University of Science and Technology of China Press.
11. Zeng, D. and Cai, J. (2009). Additive-Accelerated Rate Model for Recurrent Event. *New Developments in Biostatistics and Bioinformatics*, edited by Fan, Lin and Liu.
12. Cai, J. and Zeng, D. (2009). Overview of Semi-parametric Inferential Methods for Time-to-Event Endpoints. *Design and Analysis of Clinical Trials with Time-to-Event Endpoints*: CRC Press.
13. Cai, J. and Zeng, D. (2008). Cox Proportional Hazards Model. *Wiley Encyclopedia of Clinical Trials*, edited by D'Agostino, Sullivan and Joseph Massaro. Wiley.

## OTHER PUBLICATIONS

1. Yang, S. and Zeng, D. (2018). Discussion on "Penalized Spline of Propensity Methods for Treatment Comparison". *Journal of the American Statistical Association*, **114**, 30-32.
2. Stewart, T., Zeng, D., and Wu, M. (2018). Constructing Support Vector Machines with Missing Data. *WIREs Computational Statistics*, **10**, e1411.
3. Zhang, P., Wu, H., Chiang, C., Wang, L., Binkheder, S., Wang, X., Zeng, D., Quinney, S. and Li, L. (2017). Translational Biomedical Informatics and Pharmacometrics Approaches in the Drug Interactions Research. *Pharmacometrics & Systems Pharmacology*, <https://doi.org/10.1002/psp4.12267>.

4. Chen, J., Liu, Y., **Zeng, D.**, Rong, R., Zhao, Y. and Kosorok, M. (2016). Discussion of “Bayesian Nonparametric Estimation for Dynamic Treatment Regimes with Sequential Transition Times”. *Journal of the American Statistical Association*, **111**, 942-947.
5. Liu, Y., **Zeng, D.** and Wang, Y. (2014). Use of personalized Dynamic Treatment Regimes (DTRs) and Sequential Multiple Randomized Trials (SMARTs) in mental health studies. *Shanghai Arch Psychiatry*, **26**, 376-383.
6. Goldberg, Y., Song, R., **Zeng, D.**, and Kosorok, M. (2014). Discussion of “Dynamic treatment regimes: Technical challenges and applications”. *Electronic Journal of Statistics*, **8**, 1290–1300.
7. Chen, H. and **Zeng, D.** (2014). Discussion of “Sparse Semiparametric Nonlinear Model with Application to Chromatographic Fingerprints” by Guo et al. *Journal of the American Statistical Association*, **2014**, 1339-1349.
8. **Zeng, D.** and Wang, Y. (2013). Discussion of “Generalized Jackknife Estimators of Weighted Average Derivatives” by Cattaneo et al. *Journal of the American Statistical Association*, **108**, 1243-1256.
9. **Zeng, D.** and Lin, D.Y. (2007). Discussion of “Analysis of Longitudinal Data with Drop-out: Objectives, Assumptions and a Proposal” by P. Diggle, D. Farewell and R. Henderson. *Journal of the Royal Statistical Society, (Series C)*, **56**:544-545.

## PRESENTATIONS

1. Discussant for Statistical Research in Rapid Response to COVID-19 Pandemic: Forecasts, Risk Factors, Therapeutics and Vaccine Trials. JSM (virtual), 2021.
2. Short course: Introduction to empirical processes and their application to survival analysis. Beijing University (virtual), 2021.
3. Short course: Statistical foundation to machine learning and reinforcement learning. Shandong University (virtual), 2021.
4. Invited talk: Learning optimal dynamic treatment regimes with risk constraints. Southwestern University of Finance and Economics (virtual), 2021.
5. Invited talk: Learning personalized treatment strategies for diabetic patient. Eli-Lilly (virtual), 2021.
6. Invited talk: Semiparametric Regression Models for Multivariate Panel Count Data. ENAR (virtual), 2021.
7. Invited talk: Improve Learning Trial-Based Treatment Strategies Using Electronic Health Records. St Jude Children’s Hospital (virtual), 2020.
8. Invited talk: Improve Learning Trial-Based Treatment Strategies Using Electronic Health Records. The 2020 Pacific Causal Inference Conference. Peking University (virtual), 2020.
9. Invited talk: Semiparametric Regression Analysis of Multiple Censored Events in Family Studies. ENAR (virtual), 2020.

10. Invited talk: Combining Powers of Statistical Models and Machine Learning for Individualized Treatment Rules in EHRs. Ohio State University, 2020.
11. Invited talk: Learning Optimal Treatment Rules for Type-2 Diabetic Patients Using EHRs. ICSA, Hangzhou, 2019.
12. Invited talk: Estimation, Robust Testing and Design for Two-Phase Studies. University of Science and Technology of China, 2019.
13. Invited talk: Personalized Medicine Discovery through Machine Learning. University of Science and Technology of China, 2019.
14. Invited talk: Personalized Medicine Discovery through Machine Learning. Northeastern Normal University, 2019.
15. Invited talk: Integrative Analysis of Multiple Biomarkers in Electronic Health Records. JSM, 2019.
16. Invited talk: Integrating Multiple Trials to Learn Individualized Treatment Rules. ICSA, Raleigh, 2019.
17. Invited talk: Semiparametric Regression for Multivariate Interval-Censored and Right-Censored Data. LIDS, Pittsburgh, 2019.
18. Invited talk: Semiparametric Regression Analysis for Composite Endpoint Subject to Different Censoring. Duke-Industry Conference, Duke, 2019.
19. Invited talk: Support Vector Machine for Predicting Latent Disease Classes. Quantitative Psychology, UNC, 2019.
20. Invited talk: Learning Direct Acyclic Graph with Random Effect Models. Pisa, Italy, 2018.
21. Invited talk: Sequential Outcome-Weighted Learning for Optimal Individualized Rules with Multiple Treatments. UMN-IMA, 2018.
22. Invited talk: Estimation, Hypothesis Testing and Design in Two-Phase Studies. University of Waterloo, Waterloo, 2018.
23. Invited talk: AMOL for Personalized Medicine. University of Western Ontario, London ON, 2018.
24. Invited talk: Semiparametric Regression Analysis of Multiple Right- and Interval-Censored Events. JSM, Vancouver, 2018.
25. Invited talk: Estimating Drug-Induced Myopathy Risks Using Case-Control Sample from Electronic Medical Records. ICSA, New Brunswick, 2018.
26. Invited talk: Sequential Outcome-Weighted Learning for Optimal Individualized Rules with Multiple Treatments. SLDS, New York, 2018.
27. Invited talk: Estimation, Hypothesis Testing and Design for Two-Phase Studies. University of Pennsylvania, 2018.
28. Invited talk: Sequential Outcome-Weighted Learning for Optimal Individualized Rules with Multiple Treatments. ENAR, Atlanta, 2018.



29. Invited talk: Semiparametric Regression of Interval-Censored Data with Informative Dropout. JSM, Baltimore, 2017.
30. Invited talk: SMARTer design for personalized medicine. IMS-NUS, 2017.
31. Invited talk: Personalized medicine discovery via statistical learning. IUPUI, 2017.
32. Invited talk: Discussion for "Extraordinary Possibilities for Mobile Health to Impact Precision Medicine". Washington, DC, 2017.
33. Invited talk: Personalized medicine discovery through machine learning. Temple University, 2017.
34. Invited talk: Semiparametric regression for competing risks with interval censored data. ICSA, Shanghai, 2016.
35. Invited talk: Robust and hybrid learning for DTR. Fudan University, 2016.
36. Invited talk: SMART with enrichment design for dynamic treatment regimes. University of Pittsburgh, 2016.
37. Invited talk: Estimating treatment effects with treatment crossovers via semi-competing risks models. Duke-Industry Symposium, Duke, 2016
38. Invited talk: Semiparametric models for extreme-value distributed biomarkers with measurement error. Banff, 2016
39. Invited talk: Personalized medical diagnostics using SVM. Statistical Learning and Data Mining, UNC 2016.
40. Invited talk: SMART and SMARTer for dynamic treatment regimes. UNC causal inference working group, 2016.
41. Invited talk: Benefit and risk analysis in personalize medicine. ENAR, 2016.
42. Invited talk: Robust and hybrid learning for DTR. University of Missouri, 2016.
43. Invited talk: Personalized dose finding using outcome weighed learning. ICHIP, 2015.
44. Invited talk: Varying-coefficient proportional hazards model with biomarker signature. JSM, 2015.
45. Invited talk: SMART design with enrichment. Columbia University, New York, 2015.
46. Invited talk: AMOL for estimating dynamic treatment regimes. UNC-Charlotte, 2015.
47. Invited talk: Estimating personalized treatment regimes: from design to robust analysis. Duke University, 2015.
48. Invited talk: AMOL for estimating dynamic treatment regimes. Virginia Tech, 2014.
49. Invited talk: SMARTer design and AMOL for estimating DTRs. FDA, 2014.
50. Invited talk: AMOL for estimating dynamic treatment regimes. University of Minnesota, 2014.
51. Invited talk: New statistical learning for estimating dynamic treatment regimes. Hongkong Chinese University, 2014.

52. Invited talk: Outcome weighted learning for estimating dynamic treatment regimes. Shanghai Financial and Economic University, 2014.
53. Invited talk: Semiparametric efficient estimation in case-cohort study. Hongkong Polytech University, 2014.
54. Invited talk: Outcome weighted learning for personalized medicine. University of Science and Technology of China, 2014.
55. Invited talk: Efficient estimation in two-stage sampling designs. University of Wisconsin-Madison, 2014.
56. Invited talk: Outcome weighted learning for discovering personalized treatment regimes. University of South Carolina, 2013.
57. Invited talk: Adjust for informative missingness using high-dimensional auxiliary information. RTI, 2013.
58. Invited talk: Efficient estimation for two-phase cohort studies. Suzhou. 2013.
59. Invited talk: Outcome weighted learning for survival analysis. IMS-China, Chengdu. 2013.
60. Invited talk: Outcome weighted learning for censored data. New York University. 2013.
61. Invited talk: Outcome weighted learning for personalized medicine. New York Psychiatric Institute. 2013.
62. Contributed talk: Counterfactual p-values for benefit-risk assessment. JSM, 2012.
63. Invited talk: New learning methods for dynamic treatment regimes. 2nd Joint Biostatistical Symposium, Beijing, 2012.
64. Invited talk: Estimating treatment effect in cross-over study. Chinese Academia Sinica, Beijing, 2012.
65. Invited talk: OWL for personalized treatment selection. Chinese Academia Sinica, Beijing, 2012.
66. Invited lectures: Semiparametric models and statistical learning. Beijing Normal University, June-July, 2012.
67. Invited talk: Partial single index model for censored data. UT Houston, 2012.
68. Invited talk: Iterative OWL for dynamic treatment regime, ENAR, 2012.
69. Invited talk: Adjusting for population stratification in genome-wide association studies. IMS-China, Xi'an, 2011.
70. Invited talk: Prediction accuracy of multiple covariates for counting process. Beijing Normal University, Beijing, 2011.
71. Invited talk: Personalized treatment regimen for NSCLC. Renming University, Beijing, 2011.
72. Invited talk: Efficient estimation in the case-cohort study with transformation models. Chinese Academia Sinica, Beijing, 2011.

73. Invited talk: Partly single-index proportional hazards model. Chinese Academia Sinica, Beijing, 2011. Chinese Academia Sinica, Beijing, 2011.
74. Invited talk: Partly single-index proportional hazards model. University of Pittsburgh, 2011.
75. Invited talk: Analysis of longitudinal data with informative drop-out. George-Mason University, 2011.
76. Invited talk: Analysis of longitudinal data with informative drop-out. ENAR, Miami, 2011.
77. Invited talk: Prediction accuracy of multiple covariates for counting process. University of South Carolina, 2010.
78. Invited talk: Efficient estimation in the case-cohort study with transformation models. Brown University, 2010.
79. Invited talk: Partly single-index proportional hazards model. Columbia University, 2010.
80. Invited talk: Semiparametric transformation models for multiple biomarkers in the ROC analysis. Yale University, 2010.
81. Invited talk: Efficient estimation in the case-cohort study with transformation models. LCCC, UNC, 2009.
82. Invited talk: Efficient estimation in the case-cohort study with transformation models. JSM, 2009.
83. Invited talk: Efficient estimation in the case-cohort study with transformation models. ENAR, 2009.
84. Invited talk: Gamma-frailty transformation models with multivariate survival times. Hong Kong Baptist University, Hong Kong, 2008.
85. Invited talk: Semiparametric transformation models for current status data. National University of Singapore, Singapore, 2008.
86. Invited talk: Gamma-frailty transformation model with multivariate failure time data. Chinese Academy of Sciences, Beijing, 2008.
87. Invited talk: Gamma-frailty transformation model with multivariate failure time data. USTC, Hefei, 2008.
88. Invited talk: Doubly penalized likelihood with high-dimensional confounders. ENAR, Washington DC, 2008.
89. Invited talk: Transformation models for recurrent data with terminal event. University of Rochester, 2008.
90. Invited talk: Adjusting for informative missingness with high-dimensional auxiliary covariates. Kunming Conference, 2007.
91. Invited talk: Transformation models for recurrent data with terminal event. Zhejiang University, Hangzhou, 2007.

92. Invited talk: Semiparametrically Efficient estimation in the accelerated failure time model. Fudan University, Shanghai, 2007.
93. Invited talk: transformation models for recurrent data with terminal event. JSM, Salt Lake City, 2007.
94. Invited talk: Semiparametrically efficient estimation in the accelerated failure time model. Presented at ICSA, Raleigh, 2007.
95. Efficient estimation in the accelerated failure time model. Presented at ENAR, Atlanta, 2007.
96. Invited talk: Efficient estimation in the accelerated failure time model. Presented at WNAR, Flagstaff, 2006.
97. Invited talk: Dependent censoring with high-dimensional auxiliary information. Presented at Academic Sinica of China, Beijing, 2006.
98. Invited talk: Transformation models for cure survival data. Presented at Academic Sinica of China, Beijing, 2006.
99. Invited talk: Transformation models for counting processes. Presented at Academic Sinica of China, Beijing, 2006.
100. Semiparametric transformation models for cure data. Presented at Joint Statistical Meeting, Minneapolis, 2005.
101. Transformation models in survival data. Presented at 8th New Researcher Conference, Minneapolis, 2005.
102. Invited talk: Semiparametric transformation models for counting process. SCROS conference at Clemson University, 2005.
103. Invited talk: Semiparametric transformation models for counting process. M.D. Anderson Cancer Center, 2005.
104. Invited talk: Semiparametric transformation models for survival data with a cure fraction. University of Pennsylvania, 2005.
105. Semiparametric linear transformation model with random effects for clustered survival times. Presented at ENAR, Pittsburgh, 2004.
106. Proportional odds model with random effects. Presented at Joint Statistical Meeting, San Francisco, 2003.
107. Invited talk: Analysis of longitudinal data when observation times are outcome-informative. Presented at American Statistical Association Chapter, Indianapolis, 2003.
108. Kernel estimation of longitudinal pattern with informative observation times. Presented at ENAR conference, Tampa, 2003.
109. Analysis of longitudinal data when observation times are outcome-related. Presented at ENAR conference, Washington DC, 2002.

110. Invited talk: Analysis of longitudinal data when observation times are outcome-informative. Presented at Department of Statistics in North Carolina State University, Raleigh, 2002.
111. Invited talk: Adjusting for dependent censoring using high-dimensional auxiliary information. Presented (joint with Murphy S.A.) at Joint Statistical Meeting presentation, Atlanta, 2001.
112. Invited talk: Adjusting for dependent censoring using high-dimensional auxiliary information. Presented (joint with Murphy S.A.) at WNAR, Vancouver, 2001.
113. Analyzing CGD data using wavelet transformation. Presented at Merck Research Lab, Rahway, 2000.

## TEACHING ACTIVITIES

### 1. Courses or workshops taught in the past

- Introduction to Statistical Learning and Personalized Medicine (BIOS 740), UNC-CH, Spring 2021 (30 students)
- Statistical Learning and Personalized Medicine. Peking University Summer School (virtual), 2020 (150 students)
- Advanced Probability and Statistical Inference (I) (BIOS 760), UNC-CH, Fall 2019 (40 students)
- Advanced Probability and Statistical Inference (I) (BIOS 760), UNC-CH, Fall 2018 (18 students)
- Introduction to Statistical Learning and Personalized Medicine (BIOS 740), UNC-CH, Spring 2018 (38 students)
- Statistical Methods for Personalized Medicine. Summer School in Eastern Normal University of China, 2017 (60 students)
- Personalized Medicine and Machine Learning. Tutorial at Merck, 2017 (30 participants)
- Advanced Probability and Statistical Inference (I) (BIOS 760), UNC-CH, Fall 2016 (21 students)
- Advanced Probability and Statistical Inference (I) (BIOS 760), UNC-CH, Fall 2015 (20 students)
- Advanced Probability and Statistical Inference (I) (BIOS 760), UNC-CH, Fall 2013 (17 students)
- Advanced Survey Sampling (BIOS740), UNC-CH, Spring 2013 (5 students)
- Advanced Probability and Statistical Inference (I) (BIOS 760), UNC-CH, Fall 2011 (12 students)
- Statistical Learning and High-dimensional Data (BIOS 740), UNC-CH, Spring 2011 (16 students)
- Advanced Probability and Statistical Inference (I) (BIOS 760), UNC-CH, Fall 2009 (13 students)
- Semiparametric models in health science. Hong Kong University of Science and Technology, Hong Kong, 2008.

Semiparametric Inference with Application to Health Science, Peking University, Summer-Fall 2008

Workshop on Empirical Processes and Semiparametric Efficiency, UNC-CH, Spring 2007

Advanced Probability and Statistical Inference (I) (BIOS 760), UNC-CH, Fall 2007 (19 students)

Advanced Probability and Statistical Inference (I) (BIOS 760), UNC-CH, Fall 2006 (11 students)

Advanced Probability and Statistical Inference (I) (BIOS 260), UNC-CH, Fall 2005 (19 students)

Semiparametric Models (BIOS 240), UNC-CH, Fall 2004

## 2. *Currently supervised students*

Alexander Quinter (PhD student, co-advised by Joe Ibrahim)

Yangjiancheng Xu (PhD student, co-advised by Danyu Lin)

Jianqiao Wang (PhD student, co-advised by Danyu Lin)

Haixu Ma (PhD student, co-advised by Yufeng Liu)

Daiqi Gao (PhD student, co-advised by Yufeng Liu)

Yu Gu (PhD student, co-advised by Danyu Lin)

Wenyi Xie (PhD student)

Mochuan Liu (PhD student)

Sara Qiu (MS student)

## 3. *Previously supervised students*

Beilin Jia (PhD, co-advised by Joe Ibrahim), with dissertation "Statistical Learning Methods for Subgroup Discovery with Survival Outcome", graduated in August 2021.

Hang Yu (PhD, co-advised by Kai Zhang), with dissertation, graduated in August 2021.

Jitong Lou (PhD, co-advised by Dr. Yuanjia Wang), with dissertation "Machine Learning Methods for Precision Medicine Using Patient Electronic Health Records and Mobile Sensor Data", graduated in May 2021.

Jie He (MS student), graduated in December 2020.

Jin Wang (PhD, co-advised by Dr. Danyu Lin), with dissertation "Semiparametric Single-Index Models for Optimal Treatment Regimens With Censored Outcomes", graduated in August 2019.

Xuan Zhou (PhD, co-advised by Dr. Yuanjia Wang), with dissertation "New Statistical Learning Methods for Personalized Medical Decision Making", graduated in May 2018.

Kin Yau Wong (PhD, co-advised by Dr. Danyu Lin), with dissertation "Statistical Methods for Integrative Analysis of Multiple Types of Data", graduated in August 2017.

Fei Gao (PhD, co-advised by Dr. Danyu Lin), with dissertation "Semiparametric Regression Analysis of Interval-Censored Data", graduated in August 2017.

Yu Deng (PhD, co-advised by Dr. Jianwen Cai), with dissertation “Generalized Change-Point Hazards Models with Censored data”, graduated in May 2016.

Thomas Stewart (PhD, co-advised by Dr. Michael Wu), with dissertation “Support Vector Machine with Missing Data”, graduated in August 2015.

Fang-shu Ou (PhD, co-advised by Dr. Jianwen Cai), with dissertation “Quantile Regression with Censored Data”, graduated in August 2015.

Noorie Hyun (PhD, co-advised by Dr. David Couper), with dissertation “Analysis of Interval Censored Data Using A Longitudinal Biomarker”, graduated in May 2014.

Xiaoxi Liu (PhD), with dissertation “Variable Selection and Statistical Learning for Censored Data”, graduated in May 2014.

Xuan Zhou (MS), with thesis “Empirical Comparison of Estimating Causal Effects Based on Propensity Scores”, graduated in May 2014.

Yi Zhang (DrPH, co-advised by Dr. Haitao Chu), with dissertation “Statistical Methods for Evaluating the Diagnostic Accuracy of Incomplete Multiple Tests”, graduated in May 2013.

Jaeun Choi (PhD, co-advised by Dr. Jianwen Cai), with dissertation “Joint Modelling of Survival Analysis and Generalized Outcome”, graduated in June 2011.

Xiaoxi Liu (MS), with thesis “Variable selection in transformation models for censored data”, November 2010.

Se Hee Kim (PhD), with dissertation “Joint Analysis of Longitudinal Data and Counting Processes”, graduated in August 2010.

Kai Ding (PhD, co-advised by Dr. Michael Kosorok), with dissertation “Single-index Hazards Models”, graduated in August 2010.

Li Chen (PhD, co-advised by Dr. Danyu Lin), with dissertation “Model Checking and Prediction for Censored Data”, graduated in August 2009.

Eunhee Kim (PhD, co-advised by Dr. Joseph Ibrahim), with dissertation “Nonparametric and Semiparametric Methods in Medical Diagnostics”, graduated in August 2009.

Che-Chin Lie (MS, co-advised by Dr. Jianwen Cai), with thesis “Differentiating Tumor Malignancy Using Vessel Attributes: A Case Study with Brain Image Data”, graduated in December 2008.

Yimei Li (MS), with thesis “On The Efficiency of Resampling Methods Based on Pivotal Estimating Functions”, graduated in July 2006.

Leila Amorim (DrPH, co-advised by Dr. Jianwen Cai), with dissertation “Estimating Time-Varying Treatment Effect for Recurrent Childhood Diseases”, graduated in May 2005.

Qingxia Chen (PhD, co-advised by Dr. Joseph Ibrahim), with dissertation “Theory and Inference for Parametric and Semiparametric Methods in Missing Data Problems”, graduated in May 2005.

4. *Member of the doctoral committees of students (not updated since 2018)*: Owen Francis (Biostatistics, UNC), Lu Mao (Biostatistics, UNC), Ying Liu (Biostatistics, Columbia), Pengyue Zhang (Biostatistics, IUPUI), Ran Tao (Biostatistics, UNC), Alex Wong (Biostatistics, UNC), Andy Ni (Biostatistics, UNC), Gene Urrutia (Biostatistics, UNC), Shangbang Rao (Biostatistics, UNC), Guanhua Chen (Biostatistics, UNC), Zhengzheng Tang (Biostatistics, UNC), Qiang Sun (Biostatistics, UNC), Ruoqing Zhu (Biostatistics, UNC), Emil Cornea (Biostatistics, UNC), Danielle

Dean (Psychology, UNC), Hana Lee (Biostatistics, UNC), Chong Zhang (Statistics, UNC), Zakaria Khondker (Biostatistics, UNC), Kapuaola Gellert (Epidemiology, UNC), Lan Liu (Biostatistics, UNC), Soyoun Kim (Biostatistics, UNC), Yijuan Hu (Biostatistics, UNC), Yingqi Zhao (Biostatistics, UNC), Yiyun Tang (Biostatistics, UNC), Lily Chen (Biostatistics, UNC), Hongyuan Cao (Statistics, UNC), Xiaoyan Wang (Biostatistics, UNC), Yimei Li (Biostatistics, UNC), Yufan Zhao (Biostatistics, UNC), Arpita Ghosh (Biostatistics, UNC), Yeonseung Chung (Biostatistics, UNC), Amy Shi (Biostatistics, UNC), Guoqing Diao (Biostatistics, UNC), Yue-yun Chi (Biostatistics, UNC), Guosheng Yin (Biostatistics, UNC), Xiaofei Wang (Biostatistics, UNC), Inkyun Jung (Biostatistics, UNC), David Shoham (Epidemiology, UNC), Richard Kwok (Epidemiology, UNC), Amy Pickard (Epidemiology, UNC), Ricardo Pollitt (Epidemiology, UNC), Stephen Campbell (Epidemiology, UNC)

### **GRANT SUPPORT** (PI, subcontract PI, or coordinating center PI)

1. (Role: PI) R01GM124104A Administrative Supplement (COVID) "Efficient Statistical Learning Methods for Personalized Medicine Using Large Scale Biomedical Data" (Zeng), 2020-2021.
2. (Role: PI) R01GM124104 "Efficient Statistical Learning Methods for Personalized Medicine Using Large Scale Biomedical Data" (Zeng), 2018-2022.
3. (Role: Subcontract PI) R01 AI093234 "Statistical Methods for Ordinal Variables in HIV/AIDS Studies" (Shepherd), 2018-
4. (Role: Subcontract PI) 5 R01 NS073671-07 "Statistical Methods for Early Disease Prediction and Treatment Strategy Estimation using Biomarker Signatures" (Wang), 2017-2022.
5. (Role: DCC PI) 1 R01 AG061088-01 "Arterial Stiffness, Brain Morphology, Cognition, and Dementia in U.S. Hispanics/Latinos" (Meyer), 2019-
6. (Role: PI) GIL 288980 "Drug Safety in Electronic Medical Record Data" (Zeng), 2016-2018.
7. (Role: DCC PI) 1 RF1 AG054548-01 "MRI Measures of Cerebrovascular Injury and AD Atrophy in a Study of Latinos" (DeCarli), 2017-2021.
8. (Role: Subcontract PI) U01 NS082062 "Identifying Huntington's Disease Markers by Modern Statistical Learning Methods" (Wang), 2014-2017.
9. (Role: DCC PI) 5 R01 AG048642-05 "Study of Latinos-Investigation of Neurocognitive Aging (SOL-INCA)" (Gonzalez), 2015-2020.

### **PROFESSIONAL SERVICES**

1. Chair of Biostatistics PhD Theory Exam Committee, 2015-
2. Member of Race-Neutral Working Group, UNC, 2021.
3. Program Chair, ICSA Applied Symposium, Raleigh, 2019.
4. Ad hoc member of NIH or VA study sections, 2011, 2016, 2017, 2019, 2021.
5. CE committee of ENAR, 2016.
6. Member of Noether Award Committee, ASA, 2014-2019



7. CE Chair of Biometrics Section, ASA, 2012-2013.
8. Elected chair of Biometrics Section, ICSA, 2013
9. Chair of Biostatistics Awards Committee, 2012-2015.
10. Other committees (department or school-wide) including faculty search committee, graduate study committee, SPH awards committee
11. Conference service: organized an invited session for WNAR/IMS meeting (2006); organized an invited session for USC Nonparametric Statistical Conference (2007); organized an invited session for ICSA (2008); organized an IMS invited session for JSM (2009) ENAR local committee (2011); organized 2 invited sessions for ICSA (2016).
12. Editorial board (current and past):
  - Scandinavian Journal of Statistics (2015-)
  - Statistica Sinica (2015-)
  - Journal of Statistical Planning and Inference (2012-)
  - Science China Mathematics (2018-)
  - Statistical Theory and Related Fields (2016-)
  - Communication in Mathematics and Statistics (2012-)
  - Biostatistics and Epidemiology (2016-)
  - JASA T&M (2015-2020)
  - JASA A&C (2012-2018)
  - Statistics Surveys (2010)
  - Annals of Statistics (2008-2009)
13. Referee and other external services: American Journal of Epidemiology, Stat, JASA, Annals of Statistics, Biometrika, Biometrics, Statistica Sinica, JRSSB, Scandinavian Journal of Statistics, Lifetime Data Analysis, Annals of International Mathematical Statistics, Journal of Planning and Statistical Inference, Statistics and Probability Letter, Statistics in Medicine, Canadian Journal of Statistics, NSF grant proposals, Singapore National Medical Research Council grant proposals.