Sheng Luo PhD [1]

Contact

Email:	sheng.luo@duke.edu
Mailing address	2424 Erwin Rd, Suite 11082, Durham, NC 27705
Telephone:	(919) 668-8038 (O)
ORCID: orcid.org/0000-0003-4214-5809	

Education

Ph.D. in Biotatistics, Department of Biostatistics, Johns Hopkins University, 2008.
Dissertation: "Mixed Effects Stochastic Process Models of Smoking Cessation Behavior."
Dissertation advisor: Ciprian M. Crainiceanu. Co-advisor: Thomas A. Louis.

M.S. in Statistics/Mathematics, Department of Mathematics, University of Texas at Arlington, 2003.

M.S. in Mechanical Engineering, Huazhong University of Science and Technology, China, 2000.

B.S. in Mechanical Engineering, Huazhong University of Science and Technology, China, 1996.

Professional experience

Full Professor, Department of Biostatistics and Bioinformatics, Duke University Medical Center, September 2019 - Present

Associate Professor, Department of Biostatistics and Bioinformatics, Duke University Medical Center, August 16, 2017 - August 2019

Tenured Associate Professor, Department of Biostatistics, School of Public Health, University of Texas Health Science Center at Houston, September 2015 - August 15, 2017

Assistant Professor, Department of Biostatistics, School of Public Health, University of Texas Health Science Center at Houston, July 2008-August 2015

Predoctoral fellow and statistical consultant, Biostatistics Branch, Division of Cancer Epidemiology and Genetics, National Cancer Institute, National Institutes of Health, 2005-2008, Mentor: Dr. Nilanjan Chatterjee

Research assistant, Department of Molecular Microbiology and Immunology, Johns Hopkins University, 2004-2005

Research assistant, Department of Environmental Health Sciences, Johns Hopkins University, 2004-2005

Research assistant, Department of Mathematics, University of Texas at Arlington, 2000-2003

Honors and awards

[1] Last updated October 26, 2019

1. Young Investigator Award, the American Statistical Association, Statistics in Epidemiology Section, 2007
2. Laha Award, the Institute of Mathematical Statistics, 2007
3. Fellow Award for Research Excellence, the National Institutes of Health (NIH), 2007
4. Distinguished Student Paper Award, the International Biometrics Society, Eastern North American Region (ENAR), 2007
5. Overall first-place winner of the Scientific Poster Competition, the Delta Omega Public Health Honor Society, Alpha Chapter, Johns Hopkins Bloomberg School of Public Health, 2007
6. Louis I. and Thomas D. Dublin Award for the Advancement of Epidemiology and Biostatistics, Johns Hopkins Bloomberg School of Public Health, 2007
7. Cancer Training Research Award, the National Cancer Institute, NIH, 2005−2008
8. Guanghua Scholarship, Huazhong University of Science and Technology, China, 1999
9. Good Academic Graduate Student Award (top 5%), Huazhong University of Science and Technology, China, 1999

Grants and contract awards

Research Support

Ongoing research support

1. NIH/NIA, R56AG064803, "Integrative modeling and dynamic prediction of Alzheimer's disease", 25% effort, 9/1/2019 - 8/31/2020, role: **PI**, total direct cost: $\$317,755$, total cost: $\$482,953$.
2. NIH/NINDS, R01NS091307, "Statistical methods for clinical trials with multivariate longitudinal outcomes", 35% effort, 9/30/2015 - 6/30/2020, role: **PI**, total direct cost: $\$896,000$, total cost: $\$1,215,209$.
3. NIH/NIA, R56AG062302, "Shared genetic, epigenetic, and transcriptomic profiles between AD and PTSD: molecular insights into the heterogeneity of neuropsychiatric symptoms in Alzheimers Disease", 25% effort, 9/30/2018 - 8/31/2020, role: **co-PI**, total direct cost: $\$496,208$, total cost: $\$788,011$.
4. CHDI Foundation, "Dynamic monitoring and risk prediction of Huntington's disease", 7/1/2019-6/30/2020, role: **PI**, total direct cost: $82,465, total cost: $94,835.
5. NIH/NIDA, R34DA050267, "HEAL Consortium: Establishing innovative approaches for the Healthy Brain and Child Development Study", 5% effort, 9/30/2019 - 3/31/2021, PI: Brian Smith, MD, role: co-investigator.
6. NIH, "Determinants of Incident Stroke Cognitive Outcomes and Vascular Effects on RecoverY", 20% effort in years 1, 5, and 6 and 7% effort in years 2-4, 9/30/2019 - 8/31/2025, PI: Rebecca Gottesman (John Hopkins University), MD, role: co-investigator.
7. NIH/NICHD, 1R01HD096331, "Vestibulodynia: Understanding Pathophysiology and Determining Appropriate Treatments (Vestibulodynia: UPDATe)", 9/11/2018 - 5/31/2023, PI: Andrea Nackley, PhD, role: co-investigator.
8. NIH/NICHD, 1P50HD093074, "Co-occurring ADHD in young children with ASD: Precursors, detection, neural signatures, and early treatment", 9/7/2017 - 7/31/2022, PI: Geraldine Dawson, PhD, role: faculty statistician.

9. AKili, Inc, "Software Treatment for Actively Reducing Severity of ADHD as Adjunctive Treatment to Stimulant (STARS-ADHD-Adjunctive)", PI: Daniel Laskowitz, MD, role: faculty statistician.

Completed research support

1. KemPharm, Inc, "A multicenter, dose-optimized, double-blind, randomized, placebo-controlled, parallel efficacy laboratory classroom study with KP415 in children with attention-deficit/hyperactivity disorder (ADHD)", PI: Scott H. Kollins, PhD, role: faculty statistician.
2. NIH/NICHD, 5U01HD073984, "Study of oxytocin in autism to improve reciprocal social behaviors (SOARS-B)", 9/4/2012 - 5/31/2028, PI: Linmarie Sikich, MD, role: faculty statistician.
3. NIH/NIMH, "A phase 2a study to evaluate the Kappa Opioid Receptor as a target for the treatment of mood and anxiety spectrum disorders by evaluation of whether LY2456302 engages key neural circuitry related to the hedonic response (FAST-MAS KOR 2a)", PI: Andrew D. Krystal, MD, role: faculty statistician.
4. Intra-Cellular Therapies, Inc, "A randomized, placebo-controlled, double-blind study of safety, tolerability, pharmacokinetics and pharmacodynamics of multiple doses of ITI-214 in patients with idiopathic Parkinson's disease", PI: Laurie Sanders, PhD, role: faculty statistician.
5. CHDI Foundation (a privately-funded, not-for-profit biomedical research organization devoted to Huntington's disease), "FuRST 2.0 (Functional Rating Scale Taskforce) Development and Testing", 15% effort, project period: 2/1/2015-12/31/2017, role: **PI**, total direct cost: $\$103,275$.
6. International Parkinson and Movement Disorder Society (a professional society representing Parkinson's disease, related neurodegenerative and neurodevelopmental disorders, hyperkinetic movement disorders, and abnormalities in muscle tone and motor control), "Validating the Uniform Parkinson's Disease Rating Scale", 12/15/2012 - 11/30/2017, role: **PI**, total direct cost since 12/15/2012: $\$176,250$.
7. International Parkinson and Movement Disorder Society, "Missing values and differential item functioning analysis of the Unified Dyskinesia Rating Scale (UDysRS)", 1/1/2017 - 12/31/2017, role: **PI**, direct cost: $\$40,000$.
8. NIH/NINDS, 5U01NS043127, "Parkinson's Disease Clinical Trial: Statistical Center", 10% effort, 06/01/2016 - 05/31/2017, role: **PI**, took over from Dr. Barbara Tilley since June 1, 2016.
9. NIH/NCATS, 5KL2TR000370, "Innovative Statistical Methods for Analyzing Parkinson's Disease Study Data", 75% effort (6/1/2013 - 9/29/2015), 50% (9/30/2015 - 5/31/2016), role: **PI**, total direct cost: $\$328,983$.
10. National Parkinson Foundation, "Determining the Effects of Early Exercise and Physical Therapy on Outcomes Using the Parkinson's Outcomes Project Dataset", project period: 6/15/2015-6/14/2016, role: **PI**, total direct cost: $\$25,000$.
11. Movement Disorders Society, "The use of the MDS-UPDRS validation and translation datasets to investigate DIF and missing values", 3/1/2014 - 2/28/2015, role: **PI**, direct cost: $\$60,000$.
12. Dystonia Coalition/Office of Rare Diseases Research (ORDR)/NINDS, "Item Response Theory: An Individualized Approach to Evaluating a Composite Cervical Dystonia Rating Scale", 7/9/2012-12/31/2013, role: consultant, direct cost: $\$2,484$.
13. NIH-NINDS, 5U01NS043127, P.I. Barbara Tilley, "Parkinson's Disease Clinical Trial: Statistical Center", 40% effort, 09/01/2009 - 05/31/2013, role: Co-Investigator.
14. Subcontracted from Baylor College of Medicine, through a NIH P30 core grant, PI: Janet Butel, "Baylor-UTHouston Center for AIDS Research", 5% effort, 8/10/2010 - 5/31/2013, role: Co-Investigator.

15. NIH-NHLBI, RC2HL102419-0110, PI: Eric Boerwinkle, "Building on GWAS for NHLBI-diseases: the CHARGE consortium", 10% effort, 11/17/2009-7/31/2012, role: Co-Investigator.
16. UTHSC-SPH, PRIME award, "Classifying Ipsilateral Breast Tumor Relapse: a Novel Bayesian Approach", 09/01/2009 - 08/31/2010, role: **PI**.
17. NIH-NEI, supplement to 5U10EY012471, PI: Robert Hardy, "A Hybrid Method in Combining Treatment Effects from Matched and Unmatched Studies", 25% effort, 10/1/2009 - 9/29/2010, role: Co-Investigator.

Professional Activities

Service to Professional Society/Foundation

1. American Statistical Association, Biometrics Section Chair (January 2019 - December 2019).
2. American Statistical Association, Committee on Career Development, January 2018 - December 2020.
3. MDS Rating Scales Translation Committee, Chair, June 30, 2017 - September 30, 2021
4. The International Parkinson and Movement Disorder Society (MDS) Rating Scales Steering Committee, vice-chair (September 26, 2019 - September 30, 2021); member (June 30, 2017 - September 25, 2019)
5. MDS Scales Development Committee, June 15, 2013 - June 30, 2017
6. The Parkinson Study Group (PSG) Scientific Review Committee (SRC), December 2013 - January 2017
7. Eastern North American Region (ENAR) of the International Biometric Society (IBS) Regional Advisory Board (RAB), January 1, 2015 - December 31, 2017.
8. International Chinese Statistical Association (ICSA), Biometrics Section Chair, January 2016-December 2016.
9. American Statistical Association, Biometrics Section Publication Officer, January 2015 - December 2016.

Grant Review Services

1. The Parkinson Study Group (PSG) grant review. Review Date: May 5, 2014.
2. The Parkinson Study Group grant review. Review Date: May 22, 2015.
3. The Parkinson Study Group grant review. Review Date: July 7, 2015.
4. NIH reviewer on Special Emphasis Panel /Scientific Review Group 2015/10 ZHL1 CSR-D (O1). Review Date: July 29, 2015, SRO: Keary Cope.
5. The Parkinson Study Group grant review. Review Date: November 2015.
6. NIH reviewer on National Heart, Lung, And Blood Institute Clinical Trials Review Committee, CLTR-MA, Review Date: March 3-4, 2016, SRO: Keary Cope.

7. The Parkinson Study Group grant review. Review Date: May 2015.
8. The Parkinson Study Group grant review. Review Date: July 22, 2016.
9. NIH reviewer on Risk Prevention and Health Behavior Special Emphasis Panel, ZRG1-RPHB-C-11. Review Date: November 17-18, 2016, SRO: Claire Gutkin.
10. NIH reviewer on NINDS Special Emphasis Panel, ZNS1-SRB-C-04. Review Date: November 28, 2016, SRO: Tiziana Cogliati.
11. The Parkinson Study Group grant review. Review Date: January 27, 2017.
12. NIH reviewer on Healthcare Delivery and Methodologies (HDM-11) Small Business: Health Informatics Study Section, ZRG1-HDM-G-11. Review Date: March 13, 2017, SRO: Yvonne Ferguson.
13. NIH reviewer on Healthcare Delivery and Methodologies (HDM-11) Small Business: Health Informatics Study Section, ZRG1-HDM-A-11. Review Date: June 26, 2017, SRO: Michael Bloom.
14. NIH reviewer on NINDS Clinical Trial Readiness meeting. Review Date: July 14, 2017, SRO: Ana Olariu.
15. NIH reviewer on Small Business: Health Informatics Special Emphasis Panel, ZRG1-HDM-Z-11. Review Date: November 03, 2017, SRO: Peter Kozel.
16. NIH reviewer on Small Business: Health Informatics Special Emphasis Panel, ZRG1-HDM-H-11. Review Date: March 26-27, 2018, SRO: Sudha Veeraraghavan.
17. NIH reviewer on Biobehavioral Mechanisms of Emotion, Stress and Health Study Section, MESH, Review Date: June 7-8, 2018, SRO: Maribeth Champoux.
18. NIH reviewer on Health Decisions for Older People Study Section, National Institute of Aging, Review Date: September 12, 2018, SRO: Carmen Moten.
19. NIH reviewer on Neurological, Aging and Musculoskeletal Epidemiology (NAME) Study Section, Review Date: October 11-12, 2018, SRO: Heidi B. Friedman.
20. NIH reviewer on NIH/CSR Anonymization Study (HDM), Review period: March 2019, SRO: Jeremy Braithwaite.
21. NIH reviewer on Special Emphasis Panel, ZRG1 PSE-A (56) R, Review date: July 18-19, 2019, SRO: Delia Olufokunbi Sam.
22. NIH reviewer on Neurological, Aging and Musculoskeletal Epidemiology (NAME) Study Section, Review Date: October 17-18, 2019, SRO: Heidi B. Friedman.

Data and Safety Monitoring Board Services

1. SEGA - SEdation versus General Anesthesia for Endovascular Therapy in Acute Ischemic Stroke a Randomized Comparative Effectiveness Trial. PIs: Drs. Peng Roc Chen, Andrew Barreto, Carlos A. Artime, McGovern Medical School at The University of Texas Health Science Center at Houston, status: ongoing.

Editorial Boards

1. Associate Editor, BMC Medical Research Methodology, February 2016 - present, manuscripts handled (18).

2. Associate Editor, Journal of Alzheimer's Disease, January 2018 - present.

3. Editorial board member, Cancer Medicine, June 2018 - present.

Journal Referee (Number in parenthesis indicates # of manuscripts reviewed): American Journal of Epidemiology (4), Annals of Epidemiology (1), Annals of Human Genetics (1), Assessment (1), Australian & New Zealand Journal of Statistics (1), Bayesian Analysis (3), Biometrical Journal (1), Biometrics (6), Biostatistics (2), BMC Health Services Research (1), BMC Medical Informatics and Decision Making (1), BMC Medical Research Methodology (6), BMC Medicine (1), BMC Neurology (1), BMJ Open (1), Canadian Journal of Statistics (1), Computational Statistics & Data Analysis (6), Computer Methods and Programs in Biomedicine (1), Communications in Statistics-Theory and Methods (1), Computer Methods and Programs in Biomedicine (1), Journal of Alzheimer's Disease (1), Journal of American Statistical Association (5), Journal of Applied Probability and Statistics (1), Journal of Applied Statistics (5), Journal of Clinical Oncology (8), Journal of Consulting and Clinical Psychology (4), Journal of the Royal Statistical Society-Series C: Applied Statistics (1), Journal of Probability and Statistics (1), Journal of Statistical Computation and Simulation (1), Metron (1), Movement Disorders (6), Nature (1), Nature Biotechnology (4), Nature Communications (9), Nature Chemical Biology (1), Nature International Journal of Obesity (1), Nature Medicine (1), Plos One (2), Psychology, Health & Medicine (1), Scientific Reports (1), Statistics in Biopharmaceutical Research (1), Statistics in Medicine (14), Statistical Methods in Medical Research (4), WIREs Computational Statistics (1), Reviewer of International Society for Pharmacoeconomics and Outcomes Research (ISPOR) Assessing Prospective Observational Studies Task Force Draft Report (1).

Publications

* represents student author under Sheng Luo's supervision; ** represents student author of which Sheng Luo serves as committee member; † represents Sheng Luo as corresponding author.

Statistical methodology papers

1. **Luo S**†, Crainiceanu CM, Louis TA, Chatterjee N. (2008). Analysis of smoking cessation patterns using a stochastic mixed-effects model with a latent cured state. *Journal of The American Statistical Association,* 103(483), 1002-13, PMID: 19305513, PMCID: 2658598.
2. **Luo S**†, Crainiceanu CM, Louis TA, Chatterjee N. (2009). Bayesian inference for smoking cessation with a latent cure state. *Biometrics*, 65(3), 970-8, PMID: 19173701, PMCID: 3856570.
3. **Luo S**†, Mukherjee B, Chen J, Chatterjee N. (2009). Shrinkage estimation for robust and efficient screening of single SNP association from case-control genome-wide association studies. *Genetic Epidemiology*, 33(8), 740-50, PMID: 19434716, PMCID: 3103068.
4. Chatterjee N, Chen YH, **Luo S**, Carroll RJ. (2009). Analysis of case-control association study: SNPs, imputation and haplotypes, *Statistical Science*, 24(4), 489-502. PMCID: 2883271.
5. Crainiceanu CM, Caffo B, **Luo S**, Zippunikov V, Punjabi NM. (2011). Population value decomposition, a framework for the analysis of image populations. *Journal of the American Statistical Association*, discussion paper, 106(495), 775-90, PMID: 24415813, PMCID: 3886284.
6. Crainiceanu CM, Caffo B, **Luo S**, Zippunikov V, Punjabi NM. (2011). Rejoinder to comments on "Population value decomposition, a framework for the analysis of image populations". *Journal of the American Statistical Association*, 106(495), 803-6.

7. **Luo S**†, Yi M*, Huang X, Hunt KK. (2013). A Bayesian model for misclassified binary outcomes and correlated survival data with applications to breast cancer. *Statistics in Medicine*, 32(13), 2320-34, PMID: 22996169, PMCID: 3897718.
8. **Luo S**†, Ma J*, Kieburtz KD. (2013). Robust Bayesian inference for multivariate longitudinal data using normal/independent distributions, *Statistics in Medicine*, 32(22), 3812-28, PMID: 23494809, PMCID: 3884581.
9. Chen Y, **Luo S**, Chu H, Wei P. (2013). Bayesian inference on risk differences: an application to multivariate meta-analysis of adverse events in clinical trials, *Statistics in Biopharmaceutical Research*, 5(2), 142-50, PMID: 23853700, PMCID: 3706106.
10. Byun J**, Lai D, **Luo, S**, Risser J, Tung B, Hardy RJ. (2013). A hybrid method in combining treatment effects from matched and unmatched studies, *Statistics in Medicine*, 32(28), 4924-37, PMID: 23839782, PMCID: 3887129.
11. **Luo S**†. (2013). Joint analysis of stochastic processes with application to smoking patterns and insomnia, *Statistics in Medicine*, 32(29), 5133-44, PMID: 23913574, PMCID: 3856619.
12. **Luo S**†, Chen Y, Su X*, Chu H. (2014). `mmeta`: An `R` package for multivariate meta-analysis, *Journal of Statistical Software*, 56(11), 1-26, PMID: 24904241, PMCID: 4043353.
13. **Luo S**†. (2014). A Bayesian approach to joint analysis of multivariate longitudinal data and parametric accelerated failure time, *Statistics in Medicine*, 33(4), 580-94, PMID: 24009073, PMCID: 3947121.
14. **Luo S**†, Su X*, DeSantis S, Huang X, Yi M*, Hunt KK. (2014). Joint model for a diagnostic test without a gold standard in the presence of a dependent terminal event, *Statistics in Medicine*, 33(15), 2554-66, PMID: 24473943, PMCID: 4209250.
15. Chen Y, **Luo S**, Chu H, Su X*, Nie L. (2014). An empirical Bayesian method for multivariate meta-analysis with an application in clinical trials. *Communication in Statistics-Theory and Methods*, 43(16), 3536-51, PMID: 25089070, PMCID: 4115294.
16. **Luo S**†, Wang J*. (2014). Bayesian hierarchical model for multiple repeated measures and survival Data: an application to Parkinson's disease, *Statistics in Medicine*, 33(24), 4279-91, PMID: 24935619, PMCID: 4184935.
17. **Luo S**†, Su X*, Yi M*, Hunt KK. (2015). Simultaneous inference of a misclassified outcome and competing risks failure time data, *Journal of Applied Statistics*, 42(5), 1080-90, PMID: 25821331, PMCID: 4372162.
18. Chen Y, Chu H, **Luo S**, Nie L, Chen S. (2015). Bayesian analysis on meta-analysis of case-control studies accounting for within study correlation. *Statistical Methods in Medical Research*, 24(6), 836-55, PMID: 22143403, PMCID: 3683108.
19. Wang J*, **Luo S**†. (2016). Augmented Beta rectangular regression models: A Bayesian perspective, *Biometrical Journal*, 58(1), 206-21, PMID: 26289406, PMCID: 5064841 [** **An earlier version won Jue Wang a Student Travel Award from Parkinson's Disease Foundation in year 2014.** **]
20. **Luo S**†, Chan W, Detry M**, Massman PJ, Doody RS. (2016). Binomial regression with a misclassified covariate and outcome, *Statistical Methods in Medical Research*, 25(1), 101-17, PMID: 22421539, PMCID: 3883897.
21. **Luo S**†, Lawson AB, He B*, Elm J, Tilley BC. (2016). Bayesian multiple imputation for missing multivariate longitudinal data from a Parkinson's disease clinical trial, *Statistical Methods in Medical Research*, 25(2), 821-37, PMID: 23242384, PMCID: 3883900.

22. Benoit J**, Chan W, **Luo S**, Yeh HW, Doody R. (2016). A hidden Markov model approach to analyze longitudinal ternary outcomes when some observed states are possibly misclassified, *Statistics in Medicine*, 35(9), 1549-57, PMID: 26782946, PMCID: 4821697.
23. Chen G*, **Luo S**†. (2016). Robust Bayesian hierarchical model using normal/independent distributions, *Biometrical Journal*, 58(4), 831-51, PMID: 26711558, PMCID: 5064853.
24. He B*, **Luo S**†. (2016). Joint modeling of multivariate longitudinal measurements and survival data with applications to Parkinson's disease, *Statistical Methods in Medical Research*, 25(4), 1346-58, PMID: 23592717, PMCID: 3883896.
25. Li L, **Luo S**, Hu B, Greene T. (2017). Dynamic prediction of renal failure using longitudinal biomarkers in a cohort study of chronic kidney disease, *Statistics in Biosciences*, 9(2), 357-78.
26. Wang J*, **Luo S**†. (2017). Bayesian multivariate augmented Beta rectangular regression models for patient-reported outcomes and survival data, *Statistical Methods in Medical Research*, 26(4), 1684-99, PMID: 26037528, PMCID: 4457342.
27. Zhu H*, **Luo S**, DeSantis, S. (2017). Zero-inflated count models for longitudinal measurements with heterogeneous random effects, *Statistical Methods in Medical Research*, 26(4), 1774-86, PMID: 26113383, PMCID: 5045322.
28. Su X*, **Luo S**†. (2017). Analysis of censored longitudinal data with skewness and dependent censoring, *Communications in Statistics-Simulation and Computation*, 46(7), 5378-91, PMCID: 5646848.
29. Lin L*, **Luo S**†, Chen BE, Davis B. (2017). Bayesian analysis of multi-type recurrent events and dependent termination with nonparametric covariate function, *Statistical Methods in Medical Research*, 26(6), 2869-84, PMID: 26546256, PMCID: 5061632.
30. Wang J*, **Luo S**†. (2017). Multidimensional latent trait linear mixed model: an application in clinical studies with multivariate longitudinal outcomes, *Statistics in Medicine*, 36(20), 3244-56, PMID: 28569393, PMCID: 5540878.
31. Wang J*, **Luo S**†, Li L. (2017). Dynamic prediction for multiple repeated measures and event time data: an application to Parkinson's disease, *Annals of Applied Statistics*, 11(3), 1787-809, PMCID: 5656296, [** **An earlier version won Jue Wang ENAR Distinguished Student Paper Award in year 2016.** **]
32. Li K*, **Luo S**†. (2017). Functional joint model for longitudinal and time-to-event data: an application to Alzheimer's disease, *Statistics in Medicine*, 36(22), 3560-72, PMID: 28664662, PMCID: 5583028.
33. Chen G.*, **Luo S.**†. (2018). Bayesian hierarchical joint modeling using skew-normal/independent distributions, *Communications in Statistics-Simulation and Computation*, 47(5):1420-38, PMID: 30174369; PMCID: 6114938.
34. Zhu H*, DeSantis SM, **Luo S**. (2018). Joint modeling of longitudinal zero-inflated count and time-to-event data: A Bayesian perspective, *Statistical Methods in Medical Research*, 27(4), 1258-70, PMID: 27460540, PMCID: 5269555.
35. Lin L*, **Luo S**†, Davis B. (2018). Bayesian regression model for recurrent event data with event-varying covariate effects and event effect, *Journal of Applied Statistics*, 45(7), 1260-76, PMID: 29755162; PMCID: 5945197.
36. Yang M*, **Luo S**†, DeSantis SM. (2019). Bayesian quantile regression joint models: inference and dynamic predictions, *Statistical Methods in Medical Research*, 28(8), 2524-37, PMID: 29962288, PMCID: 6050160.

37. Wang J*, **Luo S**†, (2019). Joint modeling of multiple repeated measures and survival data from multidimensional latent trait linear mixed model, *Statistical Methods in Medical Research*, 28(10-11), 3392-3403, PMID: 30306833, PMCID: 6478574.
38. Li K*, **Luo S**†. (2019). Bayesian functional joint models for multivariate longitudinal and time-to-event data, *Computational Statistics & Data Analysis*, 129, 14-29, PMID: 30559575, PMCID: 6294314.
39. Li K*, **Luo S**†. (2019). Dynamic predictions in Bayesian functional joint models for longitudinal and time-to-event data: an application to Alzheimer's disease, *Statistical Methods in Medical Research*, 28(2), 327-42, PMID: 28750578, PMCID: 5557714.
40. Li K*, **Luo S**, Yuan S, Mt-Isa S. (2019). A Bayesian approach for individual-level drug benefit-risk assessment, *Statistics in Medicine*, 38(16), 3040-52, PMID: 30989691, PMCID: 6681911, [** **An earlier version won Kan Li Honorable Mention Award in the Biopharmaceutical Section's Student Paper Competition in year 2018.** **].
41. Li K*, **Luo S**†. (2019). Dynamic predictions of Alzheimer's disease progression using features of multiple longitudinal outcomes and time-to-event data, *Statistics in Medicine*, 38(24), 4804-18, PMID: 31386218, DOI: 10.1002/sim.8334.
42. Li C*, Xiao L, **Luo S**. (2019). Fast covariance estimation for multivariate sparse functional data, *Stat*, in press.
43. Halabi S, Li C*, **Luo S**. (2019). Developing and validating risk assessment models of clinical outcomes in modern oncology, *Journal of Clinical Oncology: Precision Oncology*, accepted.

Clinical papers

44. Anderson WF, **Luo S**, et al. (2009). Human epidermal growth factor receptor-2 and estrogen receptor expression, a demonstration project using the residual tissue repository of the Surveillance, Epidemiology, and End Results (SEER) program. *Breast Cancer Research and Treatment*, 113(1), 189-96. PMID: 18256926, PMCID: 2676874.
45. Yi M*, Buchholz TA, Meric-Bernstam F, Bedrosian I, Hwang RF, Ross MI, Kuerer HM, **Luo S**, Gonzalez-Angulo AM, Buzdar AU, Symmans WF, Feig BW, Lucci A, Huang EH, Hunt KK. (2011). Classification of ipsilateral breast tumor recurrences after breast conservation therapy can predict patient prognosis and facilitate treatment planning. *Annals of Surgery*, 253(3), 572-9. PMID: 21209588.
46. Yi M*, Mittendorf EA, Cormier JN, Buchholz TA, Bilimoria K, Sahin AA, Hortobagyi GN, Gonzalez-Angulo A, **Luo S**, Buzdar AU, Crow JR, Kuerer HM, Hunt KK. (2011). Novel staging system for predicting disease-specific survival in breast cancer patients treated with surgery as the first intervention: time to modify the current AJCC staging system. *Journal of Clinical Oncology*, 29(35), 4654-61. PMID: 22084362, PMCID: 3236648.
47. Yi M*, Meric-Bernstam F, Kuerer HM, Mittendorf EA, Bedrosian I, Lucci A, Hwang RF, Crow JR, **Luo S**, Hunt KK. (2012). Evaluation of a breast cancer nomogram for predicting risk of ipsilateral breast tumor recurrences in patients with ductal carcinoma in situ after local excision, *Journal of Clinical Oncology*, 30(6), 600-7. PMID: 22253459, PMCID: 3295558.
48. Elm JJ, the NINDS NET-PD Investigators (including **Luo S**). (2012). Design innovations and baseline findings in a long-term Parkinson's trial: the National Institute of Neurological Disorders and Stroke Exploratory Trials in Parkinson's Disease Long-Term Study-1. *Movement Disorders*, 27(12), 1513-21. PMID: 23079770, PMCID: 3481179.
49. Park M**, **Luo S**, Kwon J, Stock TH, Delclos G, Kim H, Yun-Chul H. (2013). Effects of air pollution on asthma hospitalization rates in different age groups in metropolitan cities of Korea, *Air Quality, Atmosphere and Health*. 6:543-51, PMID: 24223075, PMCID: 3821782.

50. Simuni T, **Luo S**, Chou KL, Fernandez H, He B*, Parashos S. (2013). Rankin scale as a potential measure of global disability in Parkinson's disease, *Journal of Clinical Neuroscience*, 20(9), 1200-3, PMID: 23810387, PMCID: 3947899.
51. Goetz CG, Stebbins GT, Wang L*, LaPelle NR, **Luo S**, Tilley BC. (2014). MDS-sponsored scale translation program: process, format, and clinimetric testing plan for the MDS-UPDRS and UDysRS, *Movement Disorders Clinical Practice*, 1(2), 97-101, PMCID: 5065071.
52. Kashihara K, Kondo T, Mizuno Y, Kikuchi S, Kuno S, Hasegawa K, Hattori N, Mochizuki H, Mori H, Murata M, Nomoto M, Takahashi R, Takeda A, Tsuboi Y, Ugawa Y, Yamanmoto M, Yokochi F, Yoshii F, Stebbins GT, Tilley BC, **Luo S**, Wang L*, LaPelle NR, Goetz CG; MDS-UPDRS Japanese Validation Study Group. (2014). Official Japanese version of the movement disorder society-unified Parkinson's disease rating scale: validation against the original English version, *Movement Disorders Clinical Practice*, 1(3), 200-12, PMID: 25328906, PMCID: 4199098.
53. Cubo E, Goetz CG, Stebbins GT, LaPelle NR, Tilley BC, Wang L*, **Luo S**, on behalf of the Spanish UDysRS Program Members. (2014). Independent Spanish validation of the unified Dyskinesia rating scale, *Movement Disorders Clinical Practice*, 1(3), 213-8, PMCID: 5123681.
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96. He M, Wang Z, Rankine L, **Luo S**, Nouls J, Virgincar R, Mammarappallil JG, Driehuys B, (2019). Generalized linear binning to compare hyperpolarized 129Xe ventilation maps derived from 3D radial gas exchange versus dedicated multi-slice gradient Echo MRI. *Academic Radiology*, in press.
97. Chaudhry M, McGinty KA, Mervak B, Lerebours R, Li C, Shropshire E, Ronald J, Commander L, Hertel J, **Luo S**, Bashir MR, Burke LMB. (2019). The LI-RADS v2018 Treatment Response algorithm is accurate for evaluating ablated hepatocellular carcinoma. *Radiology*, in press.
98. Tang D, Zhao Y, Liu H, **Luo S**, Clarke JW, Glass C, Su L, Shen S, Christiani DC, Gao W, Wei Q, (2019). Novel genetic variants in HDAC2 and PPARGC1A genes of the CREB-binding protein pathway predict survival of non-small cell lung cancer, *Molecular Carcinogenesis*, in press.
99. Li JB, **Luo S**, Wang MCS, Li C, Feng LF, Peng J, Li JH, Zhang X, (2019). Longitudinal associations between BMI change and the risks of colorectal cancer incidence, cancer-relate and all-cause mortality among 81,388 older adults, *BMC Cancer*, in press.

Letters

1. Chen Y, Luo S. (2011). A few remarks on "Statistical distribution of the difference of two proportions" by Nadarajah and Kotz. *Statistics in Medicine*, 30(15), 1913-1915. PMID: 21671250

2. Yi M., Meric-Bernstam F., Kuerer HM, Mittendorf EA, Bedrosian I, Lucci A, Hwang RF, Crow JR, **Luo S**, Hunt, K. (2012). Reply to K Van Zee, et al for comments on "Evaluation of a breast cancer nomogram for predicting risk of ipsilateral breast tumor recurrences in patients with ductal carcinoma in Situ after local excision", *Journal of Clinical Oncology*, 30(25), 3144-5. doi: 10.1200/JCO.2012.43.9406.

Complete List of Published Work in MyBibliography:
http://www.ncbi.nlm.nih.gov/sites/myncbi/1De4iwaVN475n/bibliography/44658186/public/?sort=date&direction=descending

Invited Talks, Presentations, and Posters

Invited talks

1. Analysis of Smoking Cessation Patterns Using a Stochastic Mixed Effects Model with a Latent Cured State, *National Cancer Institute*, June, 2007.
2. Mixed Effects Stochastic Process Models of Smoking Cessation Behavior, *Department of Biostatistics, University of Texas at Houston*, November 2007.
3. Mixed Effects Stochastic Process Models of Smoking Cessation Behavior, *Department of Biostatistics, The University of North Carolina at Chapel Hill*, January 2008.
4. Mixed Effects Stochastic Process Models of Smoking Cessation Behavior, *Division of Biostatistics, Thomas Jefferson University*, January 2008.
5. Mixed Effects Stochastic Process Models of Smoking Cessation Behavior, *Department of Biostatistics, University of Florida*, February 2008.
6. Functional and Dynamic Data Analysis to Biomedical Research - Topic Contributed, Biometrics Section, *Joint Statistical Meetings (JSM)*, August 2009, Washington DC, session number: 254.
7. Classifying Ipsilateral Breat Tumor Relapse: A Novel Bayesian Approach, *Department of Biostatistics, University of Texas at Houston*, September 2009.
8. Binomial Regression with a Misclassified Covariate and Outcome, *Department of Biostatistics, University of Texas at Houston*, April 2010.
9. Center for AIDS Research and Analysis Core: Research Opportunities, *Baylor College of Medicine*, November 2010.
10. Methodological issues of using Item Response Models in Parkinson Disease Studies, *Department of Biostatistics, University of Texas at Houston*, April 2012.
11. Recent development of Multilevel Item Response Models with applications to Parkinson's Disease, *Department of Biostatistics, University of Texas at Houston*, January 2013.
12. The Use of Multilevel Item Response Models in Studying Parkinson's Disease, *Department of Mathematics, University of Texas at Arlington*, March 2013.
13. Robust Bayesian Inference for Multivariate Longitudinal Data Using Normal/Independent Distributions, *Houston Area Chapter, American Statistical Association*, February 2014.
14. Joint model of multivariate longitudinal data using multilevel item response model with applications to Parkinson' Disease, *The Western North American Region of the International Biometric Society Meeting (WNAR)*, June 2014, Honolulu, session number: WNAR Invited 1.
15. Bayesian Hierarchical Model for Multiple Repeated Measures and Survival Data: an application to Parkinson's Disease, *Third Joint Biostatistics Symposium*, June 2014, Chengdu, China.
16. Topic contributed: Joint Analysis of Multivariate Longitudinal Ordinal Measurements and Survival Data: An Application to Parkinson's Disease, *JSM*, August 2014, Boston, session number: 326.
17. Bayesian Analysis of Multi-type Recurrent Events and Dependent Termination with Nonparametric Covariate Functions, *Department of Preventive Medicine-Biostatistics, Northwestern University Feinberg School of Medicine*, October 6, 2014.

18. Bayesian Analysis of Multi-type Recurrent Events and Dependent Termination with Nonparametric Covariate Functions, *Department of Biostatistics & Epidemiology, University of Pennsylvania Perelman School of Medicine*, November 20, 2014.
19. Effect of Creatine Monohydrate on Clinical Progression in Patients With Parkinson Disease: A Randomized Clinical Trial, *Department of Biostatistics, University of Texas at Houston*, April 17, 2015.
20. Simultaneous inference of a misclassified outcome and competing risks failure time data, *Joint 24th ICSA Applied Statistics Symposium and 13th Graybill Conference*, June 2015, Fort Collins, Colorado, session number: 13.
21. Dynamic Prediction of Alzheimer's Disease Risk Based on Longitudinal Biomarkers and Functional Data, *JSM*, August 2016, Chicago, session number: 341.
22. Dynamic Prediction for Multiple Repeated Measures and Event Time Data: an Application to Parkinson's Disease, *The 10th ICSA International Conference*, December 2016, Shanghai, China, session number: 92.
23. Dynamic Prediction of Alzheimer's Disease Progression with Longitudinal Functional Joint Mode, *2017 Confence on Lifetime Data Science*, May 2017, Storrs, Connecticut, session number: 10.
24. Functional Joint Model with application of Alzheimer's disease, *2017 ICSA Applied Statistics Symposium*, June 2017, Chicago, session number: 78.
25. Dynamic Risk Prediction and Assessment, *Precision Medicine: Statistical Challenges and Opportunities Conference*, June 2017, Chicago, session number: 78.
26. Bayesian Functional Joint Models for Longitudinal and Time-To-Event Data, Department of Statistics, North Carolina State University, October 12, 2017.
27. Dynamic Risk Prediction and Assessment, Precision Medicine: Statistical Challenges and Opportunities Conference, May 8, 2018.
28. Dynamic Prediction of Alzheimer's Disease Progression: the Big Data Approach, Duke Clinical Research Institute, April 24, 2018.
29. Dynamic Risk Assessment and Prediction, *ASA/AdvaMed Medical Device Statistical Issues Conference*, May 8, 2018, Washington, DC.
30. Dynamic prediction using multivariate functional joint model: an application to Alzheimer's disease, *2018 International Chinese Statistical Association China Conference*, July 2018, Qingdao, China, session number: 6B.
31. Missing Data Issues in the Studies of Neurodegenerative Disorders: The Methodology, *JSM*, August 2018, Vancouver, session number: 44.
32. Dynamic Prediction of Alzheimer's Disease Progression Using Features of Multiple Longitudinal Outcomes and Time-to-Event Data, *The 2nd Conference on Lifetime Data Science*, May 2019, University of Pittsburgh, session number: 13.
33. Precision Medicine for Alzheimer's Disease Monitoring and Progression: the Dynamic Prediction Approach, *Division of Biostatistics, Washington University in St. Louis*, October 4, 2019.

Presentations and posters

1. Contributed Talk: Modeling Individual Addiction Behavior Using a Mixed-Effect Model with Three States, *Joint Statistical Meetings (JSM)*, August 2006, Seattle, session number: 199.
2. Contributed Talk: Analysis of Smoking Cessation Patterns Using a Stochastic Mixed Effects Model with a Latent Cured State, *The Eastern North American Region of the International Biometric Society Spring Meeting (ENAR)*, March 2007, Atlanta, session number: 83.
3. Contributed Talk: Analysis of Smoking Cessation Patterns Using a Stochastic Mixed Effects Model with a Latent Cured State, *JSM*, August 2007, Salt Lake City, session number: 426.
4. Contributed Talk: Shrinkage Estimation for Robust and Efficient Screening of single SNP Association from Case-Control Genome-wide Association Studies, *ENAR*, March 2008, Arlington, session number: 45.

5. Contributed Talk: A Bayesian Approach for Correcting Misclassification in both Outcome Variable and Covariate, *ENAR*, March 2010, New Orleans, session number: 34.
6. Contributed Talk: Multivariate Longitudinal Bayesian Imputation for Global Statistical Test, with Applications to Parkinson's Disease, *JSM*, August 2010, Vancouver, Canada, session number: 128.
7. Contributed Talk: A Hybrid Method in Combining Treatment Effects from Matched and Unmatched Studies, presented by Jinyoung Byun*, *JSM*, August 2010, Vancouver, Canada, session number: 631.
8. Contributed Talk: A Bayesian Model for Misclassified Binary Outcomes and Correlated Survival Data, with Applications to Breast Cancer, presented by Min Yi*, *JSM*, August 2010, Vancouver, Canada, session number: 163.
9. Contributed Talk: Robust Bayesian Inference for Multivariate Longitudinal Data with Normal/Independent Distributions, *ENAR*, April 2012, Washington DC, session number: 78.
10. Poster Presentation: Analysis of Parkinson's Disease Data Using Item Response Model and Normal/Independent Distributions, *The International Parkinson and Movement Disorder Society's 16th International Congress*, June 2012, Dublin, Ireland, abstract number: 1297.
11. Contributed Talk: A Bayesian Item Response Model for Nonignorable Missing Data in Parkinson Disease Patients, *JSM*, July 2012, San Diego, session number: 244.
12. Contributed Talk: A Bayesian Approach to Joint Analysis of Parametric Accelerated Failure Time and Multivariate Longitudinal Data, *ENAR*, March 2013, Orlando, session number: 106.
13. Poster Presentation: Bayesian multiple imputation for missing multivariate longitudinal data from a Parkinson's disease clinical trial: a Power Analysis, *Society for Clinical Trials' 34th Annual Meeting*, May 2013, Boston.
14. Poster Presentation: Methods for Imputing Missing Data for Parkinson's Disease Clinical Trials with Multiple Correlated Outcomes, *The International Parkinson and Movement Disorder Society's 17th International Congress*, June 2013, Sydney, Australia, abstract number: 478.
15. Contributed Talk: Joint Modeling of Multivariate Longitudinal Measurements and Survival Data with Applications to Parkinson's Disease, *JSM*, August 2013, Montreal, Canada, session number: 308.
16. Session Chair: Developments in Genetic Association Studies, *JSM*, August 2013, Montreal, Canada, session number: 537.
17. Poster Presentation: Methods for Imputing Missing Data for Parkinson's Disease Clinical Trials with Multiple Correlated Outcomes, *Texas Regional Clinical and Translational Science Award (CTSA) Consortium Meeting*, November 2013, San Antonio.
18. Contributed Talk: Joint model for a diagnostic test without a gold standard in the presence of a dependent terminal event, *ENAR*, March 2014, Baltimore, session number: 72.
19. Session Chair: Imaging, *ENAR*, March 2014, Baltimore, session number: 58.
20. Session Chair: Recent Advances in Missing Data Methods, *The Western North American Region of the International Biometric Society Meeting (WNAR)*, June 2014, Honolulu.
21. Session Chair: Methods for Current-Status and Interval-Censored Data, *JSM*, August 2015, Seattle, session number: 80.
22. Contributed Talk: Dynamic Predictions from Joint Models for Multivariate Longitudinal Measurements and Survival Data, *JSM*, August 2015, Seattle, session number: 608.
23. Poster Presentation: Dynamic prediction for multiple repeated measures and event time data: An application to Parkinson's disease, *The International Parkinson and Movement Disorder Society's 20th International Congress*, June 2016, Berlin, Germany, abstract number: 1869.
24. Contributed Talk: Dynamic Prediction of Alzheimer's Disease Risk Based on Longitudinal Biomarkers and Functional Data, *The 4th IMS Asian Pacific Rim Meeting*, June 2016, Hong Kong, session number: CP19.
25. Session Chair: Recent Challenges in -Omics Sciences, *JSM*, August 2016, Chicago, session number: 428.
26. Poster Presentation: Bayesian Analysis of Multiple Longitudinal Outcomes of Mixed Types with Nonparametric Treatment Effects, *ENAR*, March 2017, Washington DC.

27. Poster Presentation: Differential Item Functioning in the Unified Dyskinesia Rating Scale (UDysRS), *The International Parkinson and Movement Disorder Society's 21th International Congress*, June 2017, Vancouver, Canada, abstract number: 1141.
28. Poster Presentation: Missing Data in the Unified Dyskinesia Rating Scale (UDysRS), *The International Parkinson and Movement Disorder Society's 22nd International Congress*, Oct 2018, Hong Kong, China, abstract number: 1797.
29. Session Chair: ASA Biometrics Section JSM Travel Awards (I), *JSM*, July 2019, Denver, session number: 393.
30. Poster Presentation: Successful use of UDysRS regardless of PD- or Dyskinesia-duration, *The International Parkinson and Movement Disorder Society's 23rd International Congress*, Sep 2019, Nice, France, abstract number: 1190.

Professional memberships

American Statistical Association (ASA)

International Biometric Society (ENAR)

International Chinese Statistical Association (ICSA)

The The International Parkinson and Movement Disorder Society (MDS)

Society for Clinical Trials (SCT)

Teaching

Course taught

Department of Biostatistics & Bioinformatics, Duke University

1. Categorical Data Analysis, Bio 714, Spring 2019, lead instructor, 100% responsibility.

Department of Biostatistics, University of Texas School of Public Health

1. Statistical Computing, PH 1998, Spring 2009, lead instructor, 100% responsibility.
2. Bayesian Data Analysis, PH 1998, Fall 2009, lead instructor, 100% responsibility.
3. Statistical Computing, PH 1998, Fall 2010, lead instructor, 100% responsibility.
4. Bayesian Data Analysis, PH 1998, Spring 2011, lead instructor, 100% responsibility.
5. Statistical Computing, PH 1998, Fall 2011, lead instructor, 100% responsibility.
6. Statistical Computing, PH 1930, Fall 2012, lead instructor, 100% responsibility.
7. Bayesian Data Analysis, PH 1965, Spring 2013, lead instructor, 100% responsibility.
8. Statistical Computing, PH 1930, Fall 2013, lead instructor, 100% responsibility.
9. Statistical Computing, PH 1930, Fall 2014, lead instructor, 100% responsibility.
10. Statistical Methods in Correlated Outcomes, PH 1918, Spring 2016, lead instructor, 100% responsibility.
11. Statistical Computing, PH 1930, Fall 2016, lead instructor, 100% responsibility.

Primary PhD dissertation advisor

1. Min Yi, doctoral in Biostatistics, graduated in Spring 2011, dissertation title: "Bayesian and survival model for tumor relapse status and disease-specific survival, with applications to breast cancer". Current position: Senior Biostatistician at MD Anderson Cancer Center.

2. Geng Chen, doctoral in Biostatistics, graduated in Fall 2014, dissertation title: "Bayesian inference for multivariate longitudinal data analysis using robust distributions". Current position: Senior biostatistician at GlaxoSmithKline.

3. Huirong Zhu, doctoral candidate in Biostatistics, dissertation defense occurred on November 5, 2015, dissertation title: "Two-part mixture models for zero-inflated heterogeneous measurements and time to event data", co-advise with Stacia DeSantis, PhD. Current position: Biostatistician at Texas Children Hospital.

4. Li-An Lin, doctoral candidate in Biostatistics, dissertation defense occurred on November 19, 2015, dissertation title: "Bayesian analysis of multi-type recurrent events with dependent termination". Current position: Senior biostatistician at Merck.

5. Jue Wang, doctoral candidate in Biostatistics, dissertation defense occurred on May 19, 2016, dissertation title: "Dynamic predictions from joint models for multivariate longitudinal measurements and event time data". Current position: Senior biostatistician at Genentech.

6. Ming Yang, doctoral candidate in Biostatistics, dissertation defense occurred on November 29, 2016, dissertation title: "Bayesian quantile regression joint models: inference and dynamic predictions", co-advise with Stacia DeSantis, PhD. Current position: Senior biostatistician at Genentech.

7. Kan Li, doctoral candidate in Biostatistics, dissertation defense occurred on Feb 26, 2018, dissertation title: "Functional joint models for longitudinal and time-to-event data". Current position: Senior biostatistician at Merck.

8. Jun Zhang, doctoral candidate in Biostatistics, dissertation defense occurred on November 6, 2018, dissertation title: "Bayesian semi-parametric joint modeling for Parkinson's disease progression, competing failure times and missing data". Current position: Senior biostatistician at Blue Cross Blue Shield.

9. Xuehan Ren, doctoral candidate in Biostatistics, dissertation defense occurred on March 12, 2019, dissertation title: "Dynamic prediction of recurrent cardiovascular events". Current position: Senior biostatistician at Gilead Sciences.

PhD dissertation committee

1. Lin Huo, doctoral in Biostatistics, graduated in Spring 2011, dissertation title: "Bayesian adaptive design for early phase drug-combination clinical trials".

2. Yunfei Wang, doctoral in Biostatistics, graduated in Spring 2012, dissertation title: "A simulation study using the hybrid statistics and the meta-analysis t-test for data with matched and unmatched subjects in the interim analysis of clinical trials".

3. Jin Young Byun, doctoral in Biostatistics, graduated in Spring 2012, dissertation title: "A hybrid method in combining treatment effects from matched and unmatched studies".

4. Rui Xia, doctoral in Biostatistics, graduated in year 2014, dissertation title: "A likelihood-based statistical method to detect DNA aberrations in SNP array data of tumor samples with very high normal cell contamination using haplotype structure derived from population genotypes".

5. Austin Brown, doctoral in Epidemiology, graduated in Spring 2014, dissertation title: "Healthcase professional weight loss advice, diet, physical activity and obesity in the fire service".

6. Julia Benoit, doctoral in Biostatistics, graduated in Spring 2014, dissertation title: "A hidden Markov model approach to analyze longitudinal ternary outcome subject to possible misclassification".

7. Michele Vidoni, doctoral student in Epidemiology, graduated in Spring 2016, dissertation title: "Vitamin B12 and homocysteine associations with physical function measures in older adults, data from the Baltimore longitudinal study of aging".

8. Yi-Ju Chiang, doctoral student in Biostatistics, dissertation proposal defense occured on August 18, 2016, dissertation title: "Bivariate longitudinal logistic models with misclassified covariates and outcomes".

Primary MS thesis advisor

1. Eunji Jo, master student in Biostatistics, graduated in Fall 2009, thesis title: "Comparison of Bayesian and frequentist approaches in clinical outcomes between hospitals".

2. Minjeong Park, master student in Biostatistics, graduated in Spring 2010, thesis title: "Effects of air pollution on asthma hospitalization rates in different age groups in metropolitan cities of Korea".

3. Xiao Su, master in Biostatistics, graduated in May 2012, thesis title: "Bayesian estimation of multilevel item response model with missing data".

MS students thesis committee

1. Meilin Jiang, Master Student in Duke Biostatistics & Bioinformatics, graduated in Spring 2019, thesis title: "Data Visualization for Intensive Self-monitoring Glucose Trajectories of Type II Diabetes Patients and Predictive Modeling for Hemoglobin A1c Values".

2. Zhecheng Sheng, Master Student in Duke Biostatistics & Bioinformatics, graduated in Spring 2019, thesis title: "Analyzing the association of time-varying vital signs with in-hospital mortality & ICU transfer".

3. Meingdi Xuan, Master Student in Duke Biostatistics & Bioinformatics, graduated in Spring 2019, thesis title: "Comparing survival analysis methods in estimating treatment effect when treatment switching in a randomized clinical trial".

4. Farzana Noor Bindu, Master Student in Biostatistics, graduated in Spring 2012, thesis title: "Performance of classifying diabetes and diagnostic threshold for diabetes among the Mexican American border community".

5. Jin Li, Master Student in Biostatistics, graduated in Fall 2011, thesis title: "Nonlinear dimension reduction in pathway-based genome-wide association analysis".

6. Huandong Sun, Master Student in Biostatistics, graduated in Spring 2012, thesis title: "A computerized statistical framework for coalescent analysis".

MPH students committee

1. Naalia Sami, MPH in Biostatistics, grauduated in Spring 2013, thesis title: "Effect of insurance status on stage of breast cancer diagnosis".

2. Simit Doshi, MPH graduate, thesis title: "Potential of role of statins as immunomodulators in treating pneumococcal pneumonia".

3. Jamie Marie Emert, MPH graduate, thesis title: "SEIS Community Needs Assessment Study for the Motherland and Hour Clinics in Houston, Texas".

4. Ashley A Francis, MPH graduate, thesis title: "Health significance of chlorination byproducts in drinking water: the Houston experience: a continuation study".

5. Oscar Sean Friendly, MPH graduate, thesis title: "Characterization of the east Houston particulate matter < 2.5 atmosphere: a novel method for desorbing organic constituents from airborne particulates".

6. Jacky T Lee, MPH graduate.

7. Alexander Charles Reese, MPH graduate, thesis title: "The effect of CATCH school lunch programs on obesity: a school based secondary analysis cross sectional study".

8. Yanneth Rivera, MPH graduate.