

Layla Parast
parast@austin.utexas.edu

EDUCATION	Harvard University Ph.D., Biostatistics Advisor: Tianxi Cai Committee: Tianxi Cai, David Harrington, Lee-Jen Wei Thesis Title: Landmark Prediction of Survival	2007-2012
	Stanford University M.S., Statistics	2005-2007
	University of Texas at Austin B.S. with Honors, Mathematics Specialization in Probability, Statistics and Data Analysis	2001-2005
PROFESSIONAL EXPERIENCE	University of Texas at Austin, Department of Statistics and Data Sciences Associate Professor (Tenured) Faculty Scholar, Population Research Center	January 2022 - present 2022 - present
	RAND Corporation Co-Director, RAND Center for Causal Inference Senior Statistician Statistician Associate Statistician	January 2021 - December 2021 July 2019 - January 2022 July 2015 - June 2019 September 2012 - June 2015
	Research Institute, Palo Alto Medical Foundation Interim Project Coordinator/Statistical Consultant <i>Mentor: Latha Palaniappan</i> Participated in NIH grant writing and preparation, analyzed cardiovascular disease risk using signal detection classification trees, and conducted time series analysis of quality improvement physician data to determine efficacy of feedback-audit program intended to improve care of diabetes patients	Summer 2007
RESEARCH EXPERIENCE	Department of Biostatistics, Harvard University Postdoctoral Research Assistant <i>Advisor: Tianxi Cai</i>	Summer 2012
	Department of Biostatistics, Harvard University Graduate Researcher <i>Advisors: Tianxi Cai, David Harrington, Lee-Jen Wei</i> Developed and evaluated estimates for the prediction of residual life using a landmark model, proposed procedures to quantify and test the incremental value of a new marker or intermediate outcome in terms of improvement in prediction accuracy and improved the efficiency of existing testing procedures by developing methods which incorporate intermediate outcome information	2009-2012

Department of Biostatistics, Dana Farber Cancer Institute

Research Assistant

Summer 2008

Advisors: Yi Li and Megan Othus

Analyzed survey data assessing actual vs. perceived source of information concerning the human papillomavirus (HPV) and knowledge of HPV facts and the HPV vaccine using linear models and nonparametric tests

HONORS AND AWARDS	<p>Dr. Cecile DeWitt-Morette France-UT Endowed Excellence Fund Award 2024</p> <p>Fellow, American Statistical Association 2023</p> <p>Selected Participant of the University of Texas Research Leaders Academy 2023</p> <p>CNS Emerging Faculty Leaders Program 2022</p> <p>University of Texas Faculty Travel Award 2022</p> <p>Op-Ed Project Public Voices Fellowship 2022</p> <p>RAND Health Bob Brook Scholar Award for Early-career Researchers 2014</p> <p>Invited participant of ENAR Junior Researchers Workshop 2013</p> <p>ASA Biopharmaceutical Section Student Paper Award, Honorable Mention 2012</p> <p>Invited participant of IMS New Researchers Conference 2012</p> <p>Travel Grant for SPO 2011 Universidad de Zaragoza, Spain 2011</p> <p>ASA Biometrics Section Travel Award 2011</p> <p>New England Statistics Symposium Student Paper Award 2011</p> <p>Invited participant of Building Future Faculty Program at NC State University 2011</p> <p>Section on Statistics in Epidemiology Young Investigator Award 2010</p> <p>Institute of Mathematical Statistics Laha Travel Award 2010</p> <p>Cox Scholarship for Women in Statistics, Honorable Mention 2010</p> <p>University of Texas at Austin Williams Scholar 2005</p>
INDUSTRY EXPERIENCE	<p>Amgen Inc, Thousand Oaks, CA</p> <p>Intern, Biostatistics Department, Safety Division Summer 2011</p> <p><i>Mentors: Haijun Ma, Lifan Zhou, Amy Xia, Qi Jiang</i></p> <p>Completed a research project examining effects of event adjudication on treatment effect for cardiovascular safety endpoints using Phase 3 clinical trial data. Developed various weighting schemes to incorporate uncertainty in outcome measurements resulting from the adjudication process. Evaluated weighting schemes using historical data and simulations. Presented results in a departmental seminar to an audience of biostatisticians and physicians.</p>
CONSULTING EXPERIENCE	<p>Statistical Consultant 2006 - 2016</p> <p><i>Selected Clients:</i></p> <p>Lucile Packard Children's Hospital, Department of Quality Management</p> <p>Stanford University School of Medicine, Department of Pediatrics</p> <p>Stanford University School of Medicine, Department of Anesthesia</p> <p>Stanford University School of Medicine, Department of Ophthalmology</p> <p>Stanford University School of Medicine, Department of Radiation Oncology</p>
PEER-REVIEWED ARTICLES: STATISTICAL METHODOLOGY	<p>1. Wang X, Parast L, Tian L, Cai T (2024). Towards Optimal Use of Surrogate Markers to Improve Power. <i>Statistica Sinica</i>, In press. R package: PTERP</p>

2. **Parast L**, Cai T, Tian L (2024). A Rank-Based Approach to Evaluate a Surrogate Marker in a Small Sample Setting. *Biometrics*, 80(1): ujad035. R package: `SurrogateRank`
3. Duan Y* and **Parast L** (2024). Flexible Evaluation of Surrogate Markers with Bayesian Model Averaging. *Statistics in Medicine*, 43(4): 774-792. R package: `SurrogateBMA`
4. Agniel D, Hejblum B, Thiébaud R, **Parast L** (2023). Doubly-Robust Evaluation of High-Dimensional Surrogate Markers. *Biostatistics*, 24(4): 985-999. R package: `crossurr`
5. Wang X, **Parast L**, Tian L, Han L, Cai T (2023). Robust Approach to Combining Multiple Markers to Improve Surrogacy. *Biometrics*, 79(2): 788-798. R package: `CMFsurrogate`
6. **Parast L**, Cai T, Tian L (2023). Testing for Heterogeneity in the Utility of a Surrogate Marker. *Biometrics*, 79(2): 799-810. R package: `hetsurr`
7. **Parast L**, Cai T, Tian L (2023). Using a Surrogate with Heterogeneous Utility to Test for a Treatment Effect. *Statistics in Medicine*, 42(1): 68-88. R package: `hetttest`
8. Zhou RR, Zhao SD, **Parast L** (2022). Estimation of the Proportion of Treatment Effect Explained by a High-Dimensional Surrogate. *Statistics in Medicine*, 41(12): 2227-2246. R package: `freebird`
9. **Parast L**, Garcia TP, Prentice RL, Carroll RJ (2022). Robust Methods to Correct for Measurement Error when Evaluating a Surrogate Marker. *Biometrics*, 78(1): 9-23. R package: `Rsurrogate`
10. **Parast L**, Cai T, Tian L (2021). Evaluating Multiple Surrogate Markers Using Censored Data. *Biometrics*, 77(4): 1315-1327. R package: `Rsurrogate`
11. Wang X, Cai T, Tian L, Bourgeois F, **Parast L** (2021). Quantifying the Feasibility of Shortening Clinical Trial Duration Using Surrogate Markers. *Statistics in Medicine*, 40(28): 6321-6343. R package: `OSsurvival`
12. Garcia TP and **Parast L** (2021). Dynamic Landmark Prediction for Genetic Mixture Models. *Biostatistics*, 22(3): 558-574. R package: `landmix`
13. Agniel D and **Parast L** (2021). Evaluation of Longitudinal Surrogate Markers. *Biometrics*, 77(2): 477-489. R package: `longsurr`
14. **Parast L** and Griffin BA (2020). Quantifying the Bias due to Observed Individual Confounders in Causal Treatment Effect Estimates. *Statistics in Medicine*, 39(18): 2447-2476. R package: `SBdecomp`
15. **Parast L**, Hunt P, Griffin BA, Powell D (2020). When is a Match Sufficient? A Score-based Balance Metric for the Synthetic Control Method. *Journal of Causal Inference*, 8(1): 209-228.
16. **Parast L**, Tian L, Cai T (2020). Assessing the Value of a Censored Surrogate Outcome. *Lifetime Data Analysis*, 26(2): 245-265. R package: `SurrogateOutcome`
17. Wang X, **Parast L**, Tian L, Cai T (2020). Model Free Approach to Quantifying the Proportion of Treatment Effect Explained by a Surrogate Marker. *Biometrika*, 107(1): 107-122. R package: `OptimalSurrogate`

18. **Parast L**, Cai T, Tian L (2019). Using a Surrogate Marker for Early Testing of a Treatment Effect. *Biometrics*, 75(4): 1253-1263. R package: **SurrogateTest**
19. **Parast L**, Mathews M, Friedberg M (2019). Dynamic Risk Prediction for Diabetes Using Biomarker Change Measurements. *BMC Medical Research Methodology*, 19:175.
20. **Parast L**, McCaffrey DF, Burgette LF, Hoces de la Guardia F, Golinelli D, Miles J, Griffin BA (2017). Optimizing Variance-Bias Trade-off in the TWANG Package for Estimation of Propensity Scores. *Health Services and Outcomes Research Methodology*, 17(3): 175-197.
21. **Parast L** and Rutter C (2017). Discussion of “A risk-based measure of time-varying prognostic discrimination for survival models.” *Biometrics*, 73(3): 742-744.
22. **Parast L**, Cai T and Tian L (2017). Evaluating Surrogate Marker Information using Censored Data. *Statistics in Medicine*, 36(11): 1767-1782. R package: **Rsurrogate**
23. **Parast L** and Griffin BA (2017). Landmark Estimation of Survival and Treatment Effect in Observational Studies. *Lifetime Data Analysis*, 23: 161-182. R package: **landest**
24. **Parast L**, McDermott M, and Tian L (2016). Robust Estimation of the Proportion of Treatment Effect Explained by Surrogate Marker Information. *Statistics in Medicine*, 35(10): 1637-1653. R package: **Rsurrogate**
25. **Parast L**, Tian L, Cai T (2014). Landmark Estimation of Survival and Treatment Effect in a Randomized Clinical Trial. *Journal of the American Statistical Association*, 109(505): 384-394. R package: **landest**
26. **Parast L**, Cai T (2013). Landmark Risk Prediction for Breast Cancer Survival. *Statistics in Medicine*, 32(20): 3459-3471. R package: **landpred**
27. Zheng Y, **Parast L**, Cai T, Brown M (2013). Evaluating Incremental Values from New Predictors with Net Reclassification Improvement in Survival Analysis. *Lifetime Data Analysis*, 19(3): 350-370.
28. **Parast L**, Cheng S, Cai T (2012). Landmark Prediction of Long Term Survival Incorporating Short Term Event Time Information. *Journal of the American Statistical Association*, 107(500): 1492-1501. R package: **landpred**
29. **Parast L**, Cai B, Bedayat A, Kumamaru KK, George E, Dill KE, Rybicki FJ (2012). Statistical Methods for Predicting Mortality in Patients Diagnosed with Acute Pulmonary Embolism. *Academic Radiology*, 19 (12): 294-307.
30. **Parast L**, Cheng S, Cai T (2011). Incorporating Short-term Outcome Information to Predict Long-term Survival with Discrete Markers. *Biometrical Journal*, 53: 294-307. R package: **landpred**
31. Cai T, **Parast L**, Ryan L (2010). A Meta-Analysis For Rare Events. *Statistics in Medicine*, 29(20):2078-2089.

PEER-REVIEWED
ARTICLES:
POLICY

32. Adler JT, Kuk AE, Cron DC, **Parast L**, Husain SA (2024). Insurance transitions from employer-based insurance to Medicare and waitlisting for kidney transplantation: placing *Marietta v. DaVita* in context. *Journal of the American Society of Nephrology*, In press.

33. Tolpadi A,* **Parast L**, Elliott MN, Haas A, Bradley MA, Wolf J, Teno JM, DeYoreo M, Fuentes L, Anhang Price, R (2024). Effects of a Web-Mail Mode on Response Rates and Responses to a Care Experience Survey: Results of a Randomized Experiment. *Journal of Survey Statistics and Methodology*, In press.
34. Elliott MN, Brown JA, Hambarsoomian K, **Parast L**, Beckett MK, Lehrman WG, Giordano LA, Goldstein EH, Cleary PD (2024). New Administration Protocols Improve Representativeness and Response Rates of a Survey of Hospital Patient Experience of Care. *JAMA Health Forum*, 5(1):e234929.
35. Tolpadi A,* Elliott MN, Becker K , Lehrman WG, Stark D, **Parast L** (2023). Exploring Which Patients Use Their Closest Emergency Departments Using Geocoded Data. *Journal of Emergency Medicine*, 65(4): e290-e302.
36. Mathews M,* **Parast L**, Elliott MN, Williamson S, Joestl S, Stark D, Lehrman WG, Becker K (2023). What Paradata Can Tell Us Beyond Response Rates: Exploring Device Use and Push-to-Web Access Methods in a Survey of Emergency Department Patients. *Survey Practice*, 16(1):10.29115/SP-2023-0006.
37. Desai AD, Tolpadi A, **Parast L**, Esporas M, Britto MT, Gidengil C, Wilson KM, Bardach N, Basco WT, Brittan M, Johnson DP, Wood KE, Yung S, Dawley E, Darren F Gregoire L, Hodo LN, Leggett B, Manges K, Sartori LF, Wever DE, Mangione-Smith R (2023). Improving The Quality of Written Discharge Instructions: A Multisite Collaborative Project. *Pediatrics*, 151(5): e2022059452.
38. Anhang Price R, **Parast L**, Elliott MN, Tolpadi A, Bradley MA, Schlang D, Teno J (2023). For-Profit Hospices Typically Provide Poorer Care Experiences than Not-For-Profit Hospices. *JAMA Internal Medicine*, 183(4): 311-318.
39. Mathews M,* **Parast L**, Elliott MN, Lehrman WG, Stark D, Waxman DA (2023). Associations Between Emergency Severity Index and Patient Experience of Care in the Emergency Department. *Academic Emergency Medicine*, 30(1): 59-61.
40. Leyenaar JK, Tolpadi A, **Parast L**, Esporas M, Britto MT, Gidengil C, Wilson KM, Bardach N, Basco WT, Brittan M, Williams DJ, Wood KE, Yung S, Dawley E, Elliott A, Manges K, Plemmons G, Rice T, Wiener B, Mangione-Smith R (2022). Collaborative to Increase Lethal Means Counseling for Caregivers of Youth Hospitalized with Suicidality. *Pediatrics*, 150(6):e2021055271.
41. **Parast L**, Tolpadi A, Teno J, Elliott MN, Anhang Price R (2022). Variation in Hospice Experiences by Care Setting For Patients with Dementia. *The Journal of Post-Acute and Long-Term Care Medicine*, 23(9): 1480-1485.
42. Tolpadi A,* Elliott MN, Waxman D, Becker K, Flow-Delwiche E, Lehrman WG, Stark D, **Parast L** (2022). National Travel Distances for Emergency Care. *BMC Health Services Research*, 22: 388.
43. **Parast L**, Haas A, Teno J, Elliott MN, Griffin BA, Anhang Price R (2022). Hospice Care Experiences Among Decedents with Huntington's Disease. *Journal of Pain and Symptom Management*, 64(1): 70-79.

44. Chen PG, Tolpadi A, Elliott MN, Hays RD, Lehrman WG, Stark DS, **Parast L** (2022). Gender Differences in Patients' Experience of Care in the Emergency Department. *Journal of General Internal Medicine*, 37(3): 676-679.
45. **Parast L**, Burkhart Q, Bardach N, Thombley R, Basco W, Barabell G, Williams DJ, Mitchel E, Machado E, Raghavan P, Tolpadi A, Mangione-Smith R (2022). Development and Testing of an Emergency Department Quality Measure for Pediatric Suicidal Ideation and Self-Harm. *Academic Pediatrics*, 22(3): S92-S99.
46. Ye F, **Parast L**, Hays RD, Elliott MN, Becker K, Lehrman WG, Stark D, Martino S (2022). Development and Validation of a Survey of Patients' Experience of Care in the Emergency Department. *Health Services Research*, 57(1): 102-122.
47. **Parast L**, Mathews M, Martino S, Lehrman WG, Stark D, Elliott MN (2022). Racial/ethnic Differences in Emergency Department Utilization and Experience. *Journal of General Internal Medicine*, 37: 49-56.
48. Connell SK, Burkhart Q, Tolpadi A, **Parast L**, Gidengil CA, Yung S, Basco W, Williams D, Britto MT, Brittan M, Wood KE, Bardach N, McGalliard J, Mangione-Smith R (2021). Quality of Care for Youth Hospitalized for Suicidal Ideation and Self-Harm. *Academic Pediatrics*, 21(7): 1179-1186.
49. **Parast L**, Elliott MN, Haas A, Teno J, Bradley M, Weech-Maldonado R, Anhang Price R (2021). Association Between Receipt of Emotional Support and Caregivers' Overall Hospice Rating. *Journal of Palliative Medicine*, 24(5): 689-696.
50. **Parast L**, Tolpadi A, Teno J, Elliott MN, Anhang Price R (2021). Hospice Care Experiences Among Cancer Patients and their Caregivers. *Journal of General Internal Medicine*, 36(4): 961-969.
51. Price RA, Tolpadi A, Schlang D, Bradley MA, **Parast L**, Teno JM, Elliott MN (2020). Characteristics of Hospices Providing the Highest-Quality Care. *Journal of Palliative Medicine*, 23(12): 1639-1643.
52. Quigley DD, **Parast L**, Haas A, Elliott MN, Teno JM, Price RA (2020). Differences in Caregiver Reports of the Quality of Hospice Care Across Settings. *Journal of the American Geriatrics Society*, 68(6): 1218-1225.
53. **Parast L**, Mathews M, Marc MN, Tolpadi A, Flow-Delwiche E, Lehrman WG, Stark D, Becker K (2019). Effects of Push-To-Web Mixed Mode Approaches on Survey Response Rates: Evidence from a Randomized Experiment in Emergency Departments. *Survey Practice*, 12(1): 10.29115/SP-2019-0008.
54. Mathews M,* **Parast L**, Tolpadi A, Marc MN, Flow-Delwiche E, Becker K (2019). Methods for Improving Response Rates in an Emergency Department Setting - A Randomized Feasibility Study. *Survey Practice*, 12(1): 10.29115/SP-2019-0007.
55. **Parast L**, Mathews M, Tolpadi A, Elliott MN, Flow-Delwiche L, Becker K (2019). National Testing of the Emergency Department Patient Experience of Care (EDPEC) Discharged to Community (DTC) Survey and Implications for Adjustment in Scoring. *Medical Care*, 57(1): 42-48.

56. **Parast L**, Haas A, Tolpadi A, Elliott MN, Teno J, Zaslavsky AM, Anhang Price R (2018). Effects of Caregiver and Decedent Characteristics on CAHPS Hospice Survey Scores. *Journal of Pain and Symptom Management*, 56(4): 519-529.
57. Arthur KC, Mangione-Smith R, Burkhart Q, **Parast L**, Liu H, Elliott MN, McGlynn EA, Schneider EC (2018). Quality of Care for Children with Medical Complexity: An Analysis of Continuity of Care as a Potential Quality Indicator. *Academic Pediatrics*, 18(6): 669-676.
58. **Parast L**, Burkhart Q, Gidengil C, Schneider EC, Mangione-Smith R, Lion C, McGlynn EA, Carle A, Britto MT, Elliott MN (2018). Validation of New Care Coordination Quality Measures for Children with Medical Complexity. *Academic Pediatrics*, 18(5): 581-588.
59. Price RA, Stucky B, **Parast L**, Elliott MN, Haas A, Bradley M, Teno JM (2018). Development of Valid and Reliable Measures of Patient and Family Experiences of Hospice Care for Public Reporting. *Journal of Palliative Medicine*, 21(7): 924-932.
60. Bardach NS, Burkhart Q, Richardson LP, Roth CP, Murphy JM, **Parast L**, Gidengil CA, Marmet J, Britto MT, Mangione-Smith R (2018). Hospital-Based Quality Measures for Pediatric Mental Health Care. *Pediatrics*, 141(6): e20173554.
61. **Parast L**, Bardach NS, Burkhart Q, Richardson LP, Murphy JM, Gidengil CA, Britto MT, Elliott MN, Mangione-Smith R (2018). Development of New Quality Measures for Hospital-Based Care of Suicidal Youth. *Academic Pediatrics*, 18(3): 248-255.
62. Dunbar MS, Tucker JS, Ewing BA, **Parast L**, Pedersen ER, Rodriguez A, D'Amico EJ (2018). Ethnic Differences in Cigarette Use Trajectories and Health, Psychosocial, and Academic Outcomes. *Journal of Adolescent Health*, 62(3): 327-333.
63. **Parast L**, Elliott MN, Hambarsoomian K, Teno J, Anhang Price R (2018). Effects of Survey Mode on CAHPS Hospice Survey Scores. *Journal of the American Geriatrics Society*, 66(3): 546-552.
64. Gidengil C, **Parast L**, Burkhart Q, Brown J, Elliott MN, Lion C, McGlynn EA, Schneider EC, Mangione-Smith R (2017). Development and Implementation of the Family Experiences with Coordination of Care Survey Quality Measures. *Academic Pediatrics*, 17(8): 863-870.
65. Price RA, **Parast L**, Haas A, Teno JM, Elliott MN (2017). Black And Hispanic Patients Receive Hospice Care Similar To That Of White Patients When In The Same Hospices. *Health Affairs*, 36(7):1283-1290.
66. **Parast L**, Burkhart Q, Desai AD, Simon TD, Allshouse C, Britto MT, Leyenaar JK, Gidengil CA, Toomey SL, Elliott MN, Schneider EC, Mangione-Smith R (2017). Validation of New Quality Measures for Transitions Between Sites of Care. *Pediatrics*, 139(5): e20164178.
67. Leyenaar JK, Desai AD, Burkhart Q, **Parast L**, Roth CP, McGalliard J, Marmet J, Simon TD, Allshouse C, Britto MT, Gidengil CA, Elliott MN, McGlynn EA, Mangione-Smith R (2016). Quality Measures to Assess Care Transitions for Hospitalized Children. *Pediatrics*, 138(2): e20160906.

68. Desai AD, Burkhart Q, **Parast L**, Simon TD, Allshouse C, Britto MT, Leyenaar JK, Gidengil CA, Toomey SL, Elliott MN, Schneider EC, Mangione-Smith R (2016). Development and Testing of Pediatric Survey Measures for Transitions between Sites of Care. *Academic Pediatrics*, 16(8): 760-769.
69. **Parast L**, Doyle B, Damberg CL, Shetty K, Ganz DA, Wenger NS, Shekelle PG (2015). Challenges in Assessing the Process Outcome Link in Practice. *Journal of General Internal Medicine*, 30(3): 359-364.

PEER-REVIEWED
ARTICLES:
APPLICATIONS

70. Croce EA, **Parast L**, Bhavnani D, Matsui EC (2024). Lower socioeconomic status may help explain racial disparities in asthma and atopic dermatitis prevalence: A mediation analysis. *Journal of Allergy and Clinical Immunology*, In press.
71. **Parast L**, Tian L, Cai T, Palaniappan L (2024). Statistical Workshop: Statistical Methods to Evaluate Surrogate Markers. *Medical Care*, 62(2): 102-108.
72. **Parast L**, Tian L, Cai T, Palaniappan L (2023). Can Earlier Biomarker Measurements Explain a Treatment Effect on Diabetes Incidence? A Robust Comparison of Five Surrogate Markers. *BMJ Open Diabetes Research & Care*, 11:e003585.
73. Shih RA, Rodriguez A, **Parast L**, Pederson ER, Tucker JS, Troxel WM, Kraus L, David JP, D'Amico EJ (2019). Associations Between Young Adult Marijuana Outcomes and Availability of Medical Marijuana Dispensaries and Storefront Signage. *Addiction*, 114(12): 2162-2170.
74. Osilla KC, Seelam R, **Parast L**, D'Amico EJ (2019). Associations between driving under the influence or riding with an impaired driver and future substance use among adolescents. *Traffic Injury Prevention*, 20(6): 563-569.
75. D'Amico EJ, **Parast L**, Osilla KC, Seelam R, Meredith LS, Shadel WG, Stein BD (2019). Understanding which Teenagers Benefit Most from a Brief Primary Care Substance Use Intervention. *Pediatrics*, 144(2):e20183014.
76. **Parast L**, Tucker JS, Pedersen ER, Klein DJ (2019). Utilization and Perceptions of Drop-in Center Services among Youth Experiencing Homelessness. *Journal of Behavioral Health Services & Research*, 46(2): 234-248.
77. Meredith L, Seelam R, Stein BD, **Parast L**, D'Amico EJ (2019). Adolescents with Better Mental Health Have Less Problem Alcohol Use Six Months Later. *Addictive Behaviors*, 95: 77-81.
78. Shadel WG, Seelam R, **Parast L**, Meredith LS, D'Amico EJ (2019). Is the NIAAA Screening Guide Useful for Identifying Adolescents at Risk for Later Cigarette Smoking? A Prospective Study in Primary Care Clinics. *Journal of Addiction Medicine*, 13(2): 119-122.
79. Pedersen ER, Tucker JS, Klein DJ, **Parast L** (2018). Perceived Need and Receipt of Behavioral Health Services at Drop-in Centers Among Homeless Youth. *Health Services Research*, 53(6): 4609-4628.

80. D'Amico EJ, **Parast L**, Shadel WG, Meredith LS, Seelam R, Stein BD (2018). Brief motivational interviewing intervention to reduce alcohol and marijuana use for at-risk adolescents in primary care. *Journal of Consulting and Clinical Psychology*, 86(9): 711-725.
81. Tucker JS, Pedersen ER, **Parast L**, Klein DJ (2018). Factors Associated with Drop-in Center Utilization Among Unaccompanied Youth Experiencing Homelessness. *Children and Youth Services Review*, 91: 347-354.
82. **Parast L**, Meredith LS, Stein BD, Shadel WG, D'Amico EJ (2018). Identifying Adolescents with Alcohol Use Disorder: Optimal Screening using the NIAAA Screening Guide. *Psychology of Addictive Behaviors*, 32(5), 508-516.
83. Meredith LS, Ewing BA, Stein BD, Shadel WG, Holliday SB, **Parast L**, D'Amico EJ (2018). Influence of Mental Health and Alcohol or Other Drug Use Risk on Adolescent Reported Care Received by Primary Care Providers. *BMC Family Practice*, 19(10).
84. Shih RA, **Parast L**, Pedersen ER, Troxel WT, Tucker JS, Miles JNV, Miyashiroa L, D'Amico EJ (2017). Individual, Peer, and Family Factor Modification of Neighborhood-level Effects on Adolescent Alcohol, Cigarette, E-Cigarette, and Marijuana Use. *Drug and Alcohol Dependence*, 180: 76-85.
85. Miles J, **Parast L**, Babey S, Griffin BA, Saunders J (2017). A Propensity Score Weighted Population Based Study of the Health Benefits of Dogs and Cats for Children. *Anthrozoös*, 30(3): 429-440.
86. Saunders J, **Parast L**, Babey S, Miles J (2017). Exploring the Differences Between Pet and Non-Pet Owners: Implications for Human-Animal Interaction Research and Policy. *PLOS ONE*, 12(6): e0179494.
87. Holliday SB, Ewing BA, Storholm ED, **Parast L**, D'Amico EJ (2017). Gender Differences in the Association between Conduct Disorder and Risky Sexual Behavior. *Journal of Adolescence*, 56: 75-83.
88. Pedersen ER, **Parast L**, Marshall GN, Schell TL, Neighbors C (2017). A randomized controlled trial of a web-based personalized normative feedback alcohol intervention for young adult veterans. *Journal of Consulting and Clinical Psychology*, 85(5): 459-470.
89. D'Amico EJ, **Parast L**, Meredith LS, Ewing BA, Shadel WG, Stein BD (2016). Screening in Primary Care: What is the best way to identify at-risk youth for substance use? *Pediatrics*, 138(6): e20161717.
90. Lu MT, Demehri S, Cai T, **Parast L**, Hunsaker AR, Goldhaber SZ, Rybicki FJ (2012). Axial and reformatted 4-chamber RV/LV diameter ratios on CT pulmonary angiography as predictors of death after acute pulmonary embolism. *American Journal of Roentgenology*, 198(6): 1353-1360.
91. Qi L, **Parast L**, Powers C, Cai T, Hu FB, Doria A (2011). Genetic Susceptibility to Coronary Heart Disease in Type 2 Diabetes: Three Independent Studies. *Journal of the American College of Cardiology*, 58(25): 2675-2682. [Received the American Diabetes Association Michael Modan Memorial Award, June 2010.]

92. Lighthall G, **Parast L**, Rappaport L, Wagner T (2010). Introduction of a Rapid Response System at a US Veterans Affairs Hospital Reduced Rates of Mortality and Cardiac Arrests. *Anesthesia and Analgesia*, 111(3):679.
93. Longhurst C, **Parast L**, Sandborg C, Widen E, Sullivan J, Hahn J, Dawes C, Sharek PJ (2010). Decrease in Hospital-wide Mortality After Implementation of a Commercially Sold Electronic Medical Record System. *Pediatrics*, 126(1):14.
94. Agarwal S, Classen D, Larsen G, Tofil NM, Hayes LW, Sullivan JE, Storgion SA, Coopes BJ, Craig V, Jaderlund C, Bisarya H, **Parast L**, Sharek PJ (2010). Adverse Events in Pediatric Intensive Care Units in the United States. *Pediatric Critical Care Medicine*, 11(5):568-578.
95. Gholami S, Jacobs CD, Kapp DS, **Parast L**, Norton JA (2009). The Value of Surgery for Retroperitoneal Sarcoma. *Sarcoma*.
96. Chan A, Blumenkranz MS, Wu KH, Wang G, Berker N, **Parast L**, Sanislo SR (2009). Photodynamic Therapy With and Without Adjunctive Intravitreal Triamcinolone Acetonide: A Retrospective Comparative Study. *Ophthalmic Surgery, Lasers and Imaging*, 40(6).
97. De Jesus M, **Parast L**, Shelton RC, Kokkinogenis K, Othus MK, Li Y, Allen JD (2009). Actual versus Preferred Sources of HPV Information Among Black, White, and Hispanic Parents. *Archives of Pediatrics and Adolescent Medicine*, 163(11):1066-7.
98. Sharek PJ, **Parast L**, Leong K, Combs J, Ernst K, Sullivan J, Frankel LR, Roth SJ (2007). Effect of Rapid Response Team on Hospital-wide Mortality and Code Rates Outside the ICU in a Children's Hospital. *Journal of the American Medical Association*, 298(19).

PEER-REVIEWED
REPORTS AND
TUTORIALS

99. Hepner KA, Roth CP, Sousa J, Ruder T, Brown RA, **Parast L**, Pincus HA (2023). Behavioral Health Care Delivery Following the Onset of the COVID-19 Pandemic: Utilization, Telehealth, and Quality of Care for Service Members with PTSD, Depression, or Substance Use Disorder. *RAND Corporation*, RRA421-3.
100. **Parast L** and Griffin BA (2020). Quantifying the Bias Due to Observed Individual Confounders in Causal Treatment Effect Estimates: A Tutorial for the Selection Bias Decomposition (SBdecomp) Package. *RAND Corporation*, TL-A570-3.
101. Hunt P, **Parast L**, Weinberger G (2017). Can an Informative Letter Reduce Gun Crime and be Cost-Effective? *RAND Corporation*, RR-1934-NIJ (Cleared for Public Release).
102. Price RA, Quigley DD, Bradley MA, Teno JM, **Parast L**, Elliott MN, Haas AC, Stucky BD, Mingura B, Lorenz K (2014). Hospice Experience of Care Survey: Development and Field Test. *RAND Corporation*, RR-657-CMS (Cleared for Public Release).
103. Weinick RM, Becker K, **Parast L**, Stucky BD, Elliott MN, Mathews M, Chan C, Kotzias V (2014). Emergency Department Patient Experience of Care Survey: Development and Field Test. *RAND Corporation*, RR-761-CMS (Cleared for Public Release).

OTHER
PUBLICATIONS

103. **Parast L**, Tian L, Wei LJ (2023). Assessing Response for Nivolumab Plus Ipilimumab in Squamous Cell Carcinoma of the Head and Neck [Letter to the Editor]. *JAMA Oncology*, In press.

104. **Parast L** (2023). Leveraging Patient Experience Measures as Surrogate Outcomes to Evaluate Health Care Interventions [Invited Commentary]. *Patient Experience Journal*, 10(2): 7-9.
105. **Parast L** (2023). The Unclear Costs of Childbirth [OpED]. *U.S. News & World Report*, May 9, 2023.
106. **Parast L** (2023). ‘My Son is Not Fine’: Texas is Failing Kids Who Need Us the Most [OpED]. *Dallas Morning News*, March 29, 2023.
107. **Parast L** (2023). Why Every Generation Needs to Care About Medicare [OpED]. *U.S. News & World Report*, January 31, 2023.
108. **Parast L** (2023). Timely Treatment Decisions: The Promise of Surrogate Markers [OpED]. *KevinMD Blog*, January 4, 2023.
109. **Parast L** (2022). Who Cares? Why it Matters Your Health Care Provider is Nice to You [OpED]. *The Hill*, December 1, 2022.
110. **Parast L**, Gilbert P, Wu L (2022). Banff Workshop Report: Statistical Challenges in the Identification, Validation, and Use of Surrogate Markers.
111. **Parast L** (2022). It’s Time to Address Pain Despite the Opioid Crisis [OpED]. *KevinMD Blog*, August 31, 2022.
112. **Parast L** and Elliott MN (2018). Adjusting Hospital Scores to Account for Differences in Patient Characteristics [Letter]. *BMJ Open*, November 6, 2018.
113. Taylor E and **Parast L** (2015). A Tale of Two Deliveries, Or An Out-of-Network Problem. *Health Affairs Blog*, November 3, 2015.
114. Sharek PJ, **Parast L**, Roth SJ (2011). Rapid Response Team Implementation in a Children’s Hospital [Comment]. *Archives of Pediatrics & Adolescent Medicine*, 165(12):1139.

PEER-REVIEWED
INTERNAL
PROJECT
REPORTS

Price RA, Bradley M, Schlang D, Haas A, Tolpadi A, **Parast L**, Elliott MN, Teno JM, Giordano LA, Parmer E, Timmer M, Montemayor C, Wolters N (2021). National Implementation of the CAHPS Hospice Survey. PR-A1064 (Not Cleared for Public Release).

Parast L, Becker K, Chen P, Joestl S, Mathews M, Tolpadi A, Waxman D, Elliott M, Raaen L, Phillips J (2020). National Implementation of the Emergency Department Patient Experience of Care (EDPEC) Discharged to Community (DTC) Survey. PR-A675-1 (Not Cleared for Public Release).

Price RA, Bradley M, Schlang D, Haas A, Tolpadi A, **Parast L**, Elliott MN, Teno JM, Giordano LA, Timmer M, Montemayor C, Wolters N (2020). National Implementation of the CAHPS Hospice Survey. PR-4727-CMS (Not Cleared for Public Release).

Price RA, Bradley M, Schlang D, **Parast L**, Elliott MN, Teno JM, Giordano LA, Haas A, Tolpadi A, Timmer M, Montemayor C, Dellva S, Wolters N (2019). National Implementation of the CAHPS Hospice Survey. PR-4192-CMS (Not Cleared for Public Release).

Parast L, Becker K, Mathews M, Chen P, Tolpadi A, Waxman D, Joestl S, Williamson S, Elliott M, Raaen L, Phillips J (2018). Preparation for National Implementation of the Emer-

gency Department Patient Experience of Care (EDPEC) Discharged to Community (DTC) Survey. PR-3765-CMS (Not Cleared for Public Release).

Price RA, Bradley M, Schlang D, **Parast L**, Elliott MN, Teno JM, Giordano LA, Haas A, Tolpadi A, Dellva S (2018). National Implementation of the CAHPS Hospice Survey. PR-3451-CMS (Not Cleared for Public Release).

Parast L, Becker K, Raaen L, Chen P, Waxman D, Giordano L (2017). Preparation for National Implementation of the Emergency Department Patient Experience of Care (EDPEC) Discharged to Community (DTC) Survey. PR-3073-CMS (Not Cleared for Public Release).

Price RA, Bradley M, Schlang D, **Parast L**, Elliott MN, Teno JM, Giordano LA, Haas A, Tolpadi A (2017). National Implementation of the CAHPS Hospice Survey. PR-2857-CMMS (Not Cleared for Public Release).

Parast L, Becker K, Mathews M, Tolpadi A, Elliott MN, Martino S, Brown JA, Kotzias V (2016). Preparation for Potential National Implementation of the Emergency Department Patient Experience of Care (EDPEC) Survey. PR-2500-CMMS (Not Cleared for Public Release).

Price RA, Bradley M, Giordano LA, Spencer PA, Teno JM, Elliott MN, Chen E, **Parast L**, Mingura B (2015). National Implementation of the Hospice Experience of Care Survey (CAHPS Hospice Survey). PR-1621-DHHS (Not Cleared for Public Release).

Price RA, Brown J, Cui M, Garber C, Kovalchik SA, Malsberger R, Martino S, **Parast L**, Parker AM, Reynolds KA, Stevens C, Stucky BD, Taylor EA, Weinick RM (2015). Development and Implementation of the CAHPS Survey for ACOs in the Medicare Shared Savings Program and Pioneer Model. PR-1918/1-CMS (Not Cleared for Public Release).

Stucky BD, Price RA, Brown J, Cui M, Garber C, Kovalchik SA, Malsberger R, Martino S, **Parast L**, Parker AM, Reynolds KA, Stevens C, Taylor EA, Weinick RM (2015). Development and Implementation of CAHPS for physician practices participating in the Physician Quality Reporting System. PR-1918/2-CMS (Not Cleared for Public Release).

SUBMITTED

Wang X, Cai T, Tian L, **Parast L**. Model-free Approach to Evaluate a Censored Intermediate Outcome as a Surrogate for Overall Survival.

Agniel D & **Parast L**. Robust Evaluation of Longitudinal Surrogate Markers with Censored Data.

Parast L, Tian L, Cai T. Assessing Heterogeneity in Surrogacy Using Censored Data.

Parast L and Bartroff J. Group Sequential Testing of a Treatment Effect Using a Surrogate Marker.

Cron DC, Kuk AE, **Parast L**, Husain SA, King KL, Yu M, Mohan S, Adler JT. Association Between Circle-based Kidney Allocation and Deceased-donor Kidney Transplant.

* indicates mentee/student/postdoc

INVITED
PRESENTATIONS

Joint Statistical Meetings, Portland, Oregon, August 2024
 International Conference on Frontiers of Data Science, Hangzhou, China, July 2024
 International Society for Nonparametric Statistics Conference, Braga, Portugal, June 2024
 Department of Biostatistics, University of Washington, Seattle, WA, May 2024
 2024 ENAR Meeting, Baltimore, MD, March 2024
 Harvard Biostatistics Department Colloquium, Boston, MA, February 2024
 Banff International Research Station Workshop on Bridging Statistical Strategies for Censored Covariates, Banff, Canada, January 2024
 Biostatistics Research Branch Seminar Series, Division of Clinical Research, National Institute of Allergy and Infectious Diseases, Rockville, MD, October 2023
 Joint Statistical Meetings, Toronto, Ontario, August 2023
 Lifetime Data Science Conference, Raleigh, NC, May 2023
 Bayesian, Fiducial & Frequentist Conference, Cincinnati, OH, May 2023
 American Public Health Association, Boston MA, November 2022
 Banff International Research Station Workshop, Statistical Challenges in the Identification, Validation, and Use of Surrogate Markers, Oaxaca, Mexico, August 2022
 International Biometric Conference, Riga, Latvia, July 2022
 International Society for Nonparametric Statistics Conference, Paphos, Cyprus, June 2022
 American Causal Inference Conference, Berkeley, CA, May 2022
 Texas Center for Health Outcomes Research & Education (TxCORE), April 2022
 Department of Biostatistics, University of North Carolina Chapel Hill, March 2022
 UT Austin Population Research Center Methods Seminar Series, February 2022
 Conference of the International Society for Clinical Biostatistics, July 2021[Virtual]
 Department of Biostatistics, University of Michigan, March 2021[Virtual]
 Department of Statistics and Data Sciences, University of Texas at Austin, January 2021[Virtual]
 Introducing the CAHPS Emergency Department Survey, Agency for Healthcare Quality and Research Webinar, October 2020
 Pharma Research and Development, Los Angeles, CA, February 2020
 American Public Health Association Annual Meeting, *Gender Differences in Patients' Experience with Care in the Emergency Department*, November 2019
 Department of Statistics, University of Illinois at Urbana-Champaign, October 2019
 WNAR International Biometric Society Meetings, Portland, OR, June 2019
 Joint Statistical Meetings, Vancouver, BC, August 2018
 International Society for Nonparametric Statistics Conference, Salerno, Italy, June 2018
 Women in Statistics and Data Science Conference, La Jolla, CA, October 2017

Joint Statistical Meetings, Baltimore, MD, August 2017

WNAR International Biometric Society Meetings, Santa Fe, NM, June 2017

Academy Health, Session: *Hospice Care*, New Orleans, LA, June 2017

American Association for Public Opinion Research Annual Conference, *Emergency Department Patient Experience of Care Survey in the Discharged to Community Setting - A Randomized Feasibility Study*, May 2017

American Association for Public Opinion Research Annual Conference, *Effects of Survey Mode on Responses to the CAHPS Hospice Survey of Care Experience: Results from a Randomized Experiment*, May 2017

Department of Biostatistics, Johns Hopkins University, April 2017

International Society for Non-Parametric Statistics Conference, Avignon, France, June 2016

Academy Health, Session: *Risk Prediction: Leveraging Longitudinal Data for Population Health*, Boston, MA, June 2016

University of California Los Angeles, Department of Statistics, April 2016

Fred Hutchinson Cancer Research Center, Seattle, WA, March 2016

Department of Biostatistics, Harvard University, October 2015

Joint Statistical Meetings, Seattle, WA, August 2015

International Society for Nonparametric Statistics: Biosciences, Medicine, and Novel Non-Parametric Methods Conference, Graz, Austria, July 2015

WNAR International Biometric Society Meetings, Boise, ID, June 2015

Department of Epidemiology and Biostatistics, Texas A&M University, April 2015

Department of Statistics, Texas A&M University, April 2015

Academy Health, Session: *Quality in the Medicare Program*, San Diego, CA, June 2014

Academy Health, Session: *Methods for Improving Causal Inference in Quality and Comparative Effectiveness Research*, San Diego, CA, June 2014

Women in Statistics Conference, Durham, NC, May 2014

ICSA International Conference, Hong Kong, December 2013

University of Southern California, Division of Biostatistics, Los Angeles, CA, October 2013

Fred Hutchinson Cancer Research Center, Seattle, WA, October 2013

Joint Statistical Meetings, Montreal, Canada, August 2013

WNAR International Biometric Society Meetings, Los Angeles, CA, June 2013

University of Pittsburgh, Department of Biostatistics, February 2013

National Cancer Institute Biostatistics Branch, February 2013

International Biometrics Conference, Kobe, Japan, August 2012

International Chinese Statistical Association Applied Statistics Symposium, June 2012

HIV Working Group, Harvard University, February 2012

RAND Corporation, Statistics Group, February 2012

University of California Los Angeles, Department of Biostatistics, February 2012

New England Statistics Symposium, University of Connecticut, April 2011

Statistical Methods in Epidemiology Working Group, Harvard University, March 2010

SUBMITTED
CONFERENCE
PRESENTATIONS

AcademyHealth [Poster], *Aging, Disability, and End-of-Life*, June 2021

AcademyHealth [Poster], *Aging, Disability, and End-of-Life*, June 2020

AcademyHealth [Poster], *Measuring Safety, Quality, and Value*, Washington DC, June 2019

AcademyHealth [Poster], *Consumer Choice and Incentives*, Washington DC, June 2019

AcademyHealth [Poster], *Aging, Disability, and End-of-Life*, New Orleans, LA, June 2017

Joint Statistical Meetings, Chicago, IL, August 2016 [Topic-contributed]

Pediatric Academic Societies [Poster], San Diego, CA, April 2015

ENAR International Biometric Society Meetings, Orlando, FL, March 2013

Joint Statistical Meetings, San Diego, CA August 2012

IMS New Researchers Conference, San Diego, CA July 2012

ENAR International Biometric Society Meetings, Washington DC, April 2012

PQG Quantitative Issues in Genomic Medicine [Poster], Boston, MA, November 2011

SPO Pyrenees International Workshop, Universidad de Zaragoza, Spain, September 2011

Joint Statistical Meetings, David P. Byar Award Section, Miami, FL August 2011

ENAR International Biometric Society Meetings, Miami, FL March 2011

Institute of Mathematical Statistics Annual Meeting, Sweden, August 2010

Joint Statistical Meetings, Vancouver, BC, August 2010

ENAR International Biometric Society Meetings, New Orleans, LA, March 2010

Joint Statistical Meetings, Washington DC, August 2009

Institute of Mathematical Statistics Annual Meeting, Singapore, July 2008

CURRENT
FUNDING

AHRQ K08 HS028476 (\$722K) 2022-2027

Agency for Healthcare Quality and Research

Evaluating the Role of Telehealth in Patients with End Stage Kidney Disease (ESKD)

Role: Statistician

DOD TP210235 (\$300K) 2022-2024

Department of Defense

Development of a Multi-level Clinical Trial to Increase Implementation Knowledge and Skills within the Army Integrated Prevention Program

Role: Statistician

PREVIOUS
FUNDING

NIH/NIDDK R01DK118354 (\$1.3M) 2018-2023

National Institute of Diabetes and Digestive and Kidney Diseases Robust Statistical Methods to Identify and Use Surrogate Markers in Diabetes Role: Principal Investigator	
75FCMC19F0026 (\$6.6M) Centers for Medicare and Medicaid Services National Implementation of the CAHPS Hospice Survey Role: Statistician	2019-2022
Office of Secretary of Defense Remote Quality of Behavioral Health Care Among Military Health System Beneficiaries Role: Statistician	2021
U18 HS025291-01 Agency for Healthcare Research and Quality Pediatric Hospital Care Improvement Project Role: Statistician	2016-2021
GS-10F-0275P (\$2.1M) Centers for Medicare and Medicaid Services National Implementation of the Emergency Department Patient Experience of Care Discharged to Community Survey Role: Project Director	2018-2020
HHSM-500-2016-00093G (\$4.5M) Centers for Medicare and Medicaid Services Preparation for National Implementation of the Emergency Department Patient Experience of Care Discharged to Community Survey Role: Project Director	2016-2018
NIH/NIDDK R21DK103118 (\$476K) National Institute of Diabetes and Digestive and Kidney Diseases Robust Statistical Methods to Identify Surrogate Markers in Diabetes Role: Principal Investigator	2014-2017
HHSM-500-2016-00022G (\$5.4M) Centers for Medicare and Medicaid Services National Implementation of the CAHPS Hospice Survey Role: Statistician	2016-2018
NIH/NIAAA R01AA021786 (\$3.3M) National Institute on Alcohol Abuse and Alcoholism Alcohol Screening in an Ethnically Diverse Sample of Adolescents in Primary Care Role: Statistician	2012-2018
NIH/NIAAA R01AA020883 (\$3.5M) National Institute on Alcohol Abuse and Alcoholism Adolescent Alcohol and Other Drug Use Trajectories: The Role of Race and Ethnicity	2012-2018

Role: Statistician

NIH/NIDA R21DA039076 (\$514K) 2015-2017
 National Institute on Drug Abuse
 Engaging Substance Using Homeless Youth in Drop-in Center Services
 Role: Statistician

HHSM-500-2005-00028I (\$12.9M) 2011-2017
 Centers for Medicare and Medicaid Services
 CAHPS Survey Implementation for the Medicare Shared Savings Program
 Role: Lead Statistician

NIJ 2013-R2-CX-0016 (\$400K) 2013-2017
 National Institute of Justice
 Disrupting Illegal Gun Transfers
 Role: Investigator/Statistician

HHSM-500-2014-00421G (\$2.8M) 2014-2016
 Centers for Medicare and Medicaid Services
 Preparation for National Implementation of the Emergency Department Patient Experience of Care Survey
 Role: Project Director

U18HS020506-01 (\$2.9M) 2011-2016
 Agency for Healthcare Research and Quality
 Center of Excellence on Quality of Care Measures for Children with Complex Needs
 Role: Statistician

NIH/NIAAA 1R34AA022400 (\$692K) 2013-2016
 National Institute on Alcohol Abuse and Alcoholism
 Brief Online Intervention to Reduce Heavy Alcohol Use among Young Veterans
 Role: Statistician

HHSM-500-2014-00350G (\$3.2M) 2014-2016
 Centers for Medicare and Medicaid Services
 National Implementation of the Hospice Experience of Care Survey
 Role: Statistician

HHSM-500-2011-AZ0S.SIP.02 (\$3.6M) 2012-2014
 Centers for Medicare and Medicaid Services
 Analyses Related to the 2015 National Impact Assessment of Medicare Quality Measures
 Role: Statistician

HHSM-500-2012-00126G (\$1M) 2012-2014
 Centers for Medicare and Medicaid Services
 Hospice Patient Experience of Care Survey
 Role: Statistician

HHSM-500-2012-00059G (\$1.3M) 2012-2014
Centers for Medicare and Medicaid Services
Emergency Room Patient Experience of Care Survey
Role: Statistician

R01HD066591 (\$415K) 2010-2014
Eunice Kennedy Shriver National Institute of Child Health and Human Development
Estimating the Causal Effect of Interacting with Pet Dogs and Cats
Role: Statistician

Quantitative Genomics/Interdisciplinary Predoctoral NIH Training Grant 2010-2011
Merck Company Foundation Quantitative Sciences Fellowship 2008-2010
Cancer Predoctoral NIH Training Grant 2007-2010
Wray Jackson Smith Scholarship 2005

SHORT COURSES TAUGHT *Methods to Evaluate Surrogate Markers* August 2023
JSM Continuing Education Short Course

Evaluating Surrogate Marker Information April 2017
ENAR Webinar Short Course

Use of Biomarkers for Surrogacy and Personalized Treatment Selection September 2016
ASA Biopharmaceutical Section Regulatory-Industry Statistics Workshop

How to do Biostatistics: a Short Course for Medical Researchers Winter 2007
Stanford University, School of Medicine

TEACHING EXPERIENCE **Professor**, University of Texas at Austin, Department of Statistics and Data Sciences
SDS 320E: Elements of Statistics Spring 2024
SDS 190: Readings in Statistics Spring 2024
SDS 313: Introduction to Data Science Fall 2022, Fall 2023
SDS 384: Biostatistical Methods Spring 2023

Professor, University of Texas at Austin, Master's in Data Science
DS 395T: Data Science for Health Discovery and Innovation Spring 2024

Lecturer, Harvard University, Department of Biostatistics
Problem Solving in Advanced Statistics, *course for PhD students* Spring 2011, Fall 2011
Introduction to Stata, *a one hour course for incoming students* Fall 2010, 2011

Head Teaching Assistant, Harvard University, Department of Biostatistics
Biostat 200: Principles of Biostatistics Fall 2009

Teaching Assistant, Harvard University, Department of Biostatistics
Biostat 200: Principles of Biostatistics Fall 2008
Biostat 223: Applied Survival Analysis Spring 2009, 2010

Teaching Assistant, Stanford University, Department of Statistics
Stat 141: Introduction to Biostatistics Fall 2006
Stat 191: Introduction to Applied Statistics Winter 2007

STUDENT ADVISING	Emily Hsiao (PhD advisor) Rebecca Knowlton (PhD advisor) Anna Morgan (PhD Dissertation Committee member) Rimli Sengupta (PhD Dissertation Committee member) Yunshan Duan (PhD Dissertation Committee member) Thao Nguyen (Undergraduate research project advisor)
MENTORSHIP	<p>Center for a Learning Health Systems (CELEHS), Harvard University Faculty Speaker July 2023 Invited guest speaker at Data Science in Action: Machine Learning for Self-Driving Cars, a two-week summer program to introduce programming and machine learning to high school students</p> <p>Minority Institute for Neuroscience Diversity Scholars (MINDS) Program Mentor September 2017 National Institute of Neurological Disorders and Stroke funded program to promote the advancement of underrepresented junior faculty and senior postdocs in neuroscience</p> <p>Harvard Health Policy Data Science Lab Lunch Mentor August 2017 Informal networking opportunity for trainees of the Harvard Health Policy Data Science Lab to learn about the diversity of research topics and careers in quantitative public health and policy</p>
GRANT REVIEW	<p>National Science Foundation (NSF) Statistics Program Reviewer March 2022</p> <p>NIH Biostatistical Methods and Research Design (BMRD) Study Section Ad hoc Reviewer November 2021 Ad hoc Reviewer February 2019</p> <p>NCCIH/NIH Promoting Research on Music and Health: Phased Innovation Award for Music Interventions Biostatistician Discussant March 2021</p> <p>NIDDK Fellowships Review Panel in Digestive Diseases and Nutrition (DDN) Ad hoc Reviewer February 2020 Ad hoc Reviewer February 2023</p> <p>Patient-Centered Outcomes Research Institute (PCORI) Merit Reviewer Pragmatic Clinical Studies Cycle 3 2017</p> <p>UK Medical Research Council Ad hoc Reviewer for Methodology Research Panel 2014</p>
CONFERENCE ORGANIZATION	<p>Organizer, 2024 Rank-Based Identification of Surrogates in Small Ebola Studies (RISE) Symposium and Workshop, in collaboration with the Institut National de la Santé et de la Recherche Médicale (INSERM) and Université de Bordeaux, supported by the Dr. Cecile DeWitt-Morette France-UT Endowed Excellence Fund</p> <p>Program Committee Member, 2024 Hangzhou international Conference on Frontiers of</p>

Data Science

Program Committee Member, 2024 ENAR International Biometric Society Meetings

Invited Session Organizer, 2023 Joint Statistical Meetings, *Surrogate Markers: Identification, Use, and Challenges*

Organizer, American Causal Inference Conference, May 2023

Committee Member and Abstract Reviewer, International Conference on Health Policy Statistics 2023 Outreach Committee

Primary Organizer, Workshop supported by the Banff International Research Station (BIRS) for Mathematical Innovation and Discovery “Statistical Challenges in the Identification, Validation, and Use of Surrogate Markers” at Casa Matematica Oaxaca (CMO), August 2022

Invited Session Organizer, 2022 International Biometric Conference, *Surrogate Markers: Evaluation and Use in Clinical Studies*

Co-Organizer, 2021 RAND Center for Causal Inference Symposium, June 2021

Committee Member, International Conference on Health Policy Statistics 2020 Outreach Committee

Invited Session Organizer, 2019 WNAR International Biometric Society Meetings, *Biomarkers and Clinical Trials*

Invited Session Organizer, 2018 Joint Statistical Meetings, *What Does it Mean to Work on Health Policy?*

Committee Member, IBS Conference Advisory Committee, 2018-2025

Invited Session Organizer, 2017 WNAR International Biometric Society Meetings, *Statistical Challenges in Studies Involving Electronic Health Records*

Roundtable Discussant, 2016 Joint Statistical Meetings: Health Policy Statistics Section, *Statistical Careers in Health Policy*

Invited Session Organizer, 2016 International Society for Nonparametric Statistics Annual Conference, *Nonparametric Methods With Applications in Health*

Committee Member, International Conference on Health Policy Statistics Scientific Organizing Committee, 2015

Invited Session Organizer, 2015 Joint Statistical Meetings, *Challenges in the Identification and Validation of Surrogate Markers*

Invited Session Organizer, 2015 International Society for Nonparametric Statistics: Biosciences, Medicine, and novel Non-Parametric Methods Conference, *Nonparametric Methods to Improve Treatment Effect Estimation*

Invited Session Organizer, 2015 WNAR International Biometric Society Meetings, *Challenges in the Identification and Validation of Surrogate Markers*

Program Chair, 2015 WNAR International Biometric Society Meetings

Invited Panel Organizer and Panelist, Women in Statistics Conference *Post-PhD: What to Expect Your First Year*

Invited Session Organizer and Panelist, 2013 Joint Statistical Meetings, *Post-PhD: What to Expect Your First Year*

Invited Session Organizer, 2013 WNAR International Biometric Society Meetings, *Robust*

Methods to Estimate Survival and Treatment Effect

Poster Judge, 2013 ENAR International Biometric Society Meetings

Invited Session Organizer, 2012 Joint Statistical Meetings, *Biomarkers for Risk Prediction, Disease Detection, and Treatment Effect Estimation: Statistical Issues*

OTHER SERVICE	<p>Committee Member, ASA Committee on Award of Outstanding Statistical Application, 2024-2026</p> <p>Chair, ASA Health Policy Statistics Section, 2024</p> <p>Representative to the Council of Sections, ASA Biometrics Section, 2023-2025</p> <p>Panelist, WNAR Career Panel, WNAR Student Committee, January 2022</p> <p>Student Paper Award Reviewer, International Conference on Health Policy Statistics 2020 Student Paper Award Committee</p> <p>WNAR Representative, International Biometric Society (IBS) Council, 2017-2021</p> <p>Chair, COPSS Awards Committee, 2018</p> <p>Committee Member, COPSS Awards Committee, 2016-2019</p> <p>Secretary, ASA Health Policy Statistics Section, 2016-2017</p> <p>Organizer, RAND Statistics Seminar Series, 2013 - 2014</p> <p>Department Representative, Graduate Student Council, 2009 - 2011</p>
DATA SAFETY AND MONITORING BOARD PARTICIPATION	<p>Member, Data Safety and Monitoring Board for IMPACT Diabetes Study, 2016-2018</p> <p>Chair and Member, Data Safety and Monitoring Board for Strength Training Regimen for Normal Weight Diabetes (STRONG-D) Study, 2016-2018</p> <p>Member, Data Safety and Monitoring Committee for RAND Center of Excellence for the Study of Complementary and Alternative Medicine, 2015-2016</p>
EDITORIAL SERVICE	<p>Contributing Editor, Lines from Layla column, <i>IMS Bulletin</i>, 2023-Present</p> <p>Statistical Editor, <i>Medical Care</i>, 2022 - Present</p> <p>Associate Editor, <i>Journal of the Royal Statistical Society, Series B</i>, 2024-Present</p> <p>Associate Editor, <i>Biometrics</i>, 2018 - Present</p> <p>Associate Editor, <i>Biostatistics</i>, 2018 - 2024</p>
JOURNAL AND BOOK REFEREE	<p>Academic Pediatrics</p> <p>American Journal of Epidemiology</p> <p>Annals of Applied Statistics</p> <p>Annals of Internal Medicine</p> <p>Anthrozoös</p> <p>Biometrical Journal</p> <p>Biometrics</p> <p>Biometrika</p> <p>Biostatistics</p> <p>BMC Health Services Research</p> <p>BMC Pediatrics</p>

Clinical Epidemiology
 Epidemiologic Methods
 Health Services Outcomes and Outcomes Research Methodology
 Health Services Research
 Hospital Pediatrics
 International Journal of Biostatistics
 International Journal for Quality in Health Care
 JAMA Pediatrics
 Journal of the American Statistical Association
 Journal of Pain and Symptom Management
 Lifetime Data Analysis
 Mathematics
 Medical Care
 Pediatrics
 PLOS One
 Springer: Lecture Notes in Statistics
 Statistics in Biopharmaceutical Research
 Statistics in Biosciences
 Statistics in Medicine

PROFESSIONAL
MEMBERSHIPS

Academy Health
 American Public Health Association
 American Statistical Association
 Institute of Mathematical Statistics
 International Society for Nonparametric Statistics
 Society for Causal Inference
 ENAR of The International Biometric Society

SOFTWARE

landpred, an R package for landmark prediction of a survival outcome incorporating covariate and short-term event information, on CRAN.
landest, an R package to estimate survival and a treatment effect using a landmark estimation approach, on CRAN.
Rsurrogate, an R package for robust estimation of the proportion of treatment effect on the primary outcome that is explained by the treatment effect on a potential surrogate marker, on CRAN.
SurrogateTest, an R package for early testing for a treatment effect using surrogate marker information, on CRAN.
SurrogateOutcome, an R package to estimate the proportion of treatment effect on a censored primary outcome that is explained by the treatment effect on a censored surrogate outcome/event, on CRAN.
OptimalSurrogate, an R package to identify an optimal transformation of a potential surrogate marker such that the proportion of the treatment effect on a primary outcome can be inferred based on the treatment effect on this identified optimal transformation, written by Dr. Xuan Wang, on CRAN.
SBdecomp, an R package with parametric and nonparametric methods to quantify the propor-

tion of the estimated selection bias explained by each confounder, on CRAN.

longsurr, an R package for analyzing the surrogate value of longitudinal markers, and quantifying the proportion of a treatment effect explained by a longitudinal surrogate marker, written by Dr. Denis Agniel, on CRAN.

landmix, an R package for nonparametric prediction of survival outcomes for mixture data that incorporates covariates and landmarking, co-written with Dr. Tanya Garcia, on CRAN.

hetsurr, an R package to examine and test for heterogeneity in the utility of the surrogate marker with respect to a baseline covariate, co-written with Dr. Lu Tian, on CRAN.

crossurr, an R package to evaluate a high-dimensional surrogate marker using a doubly robust method via crossfitting, written by Dr. Denis Agniel, on CRAN.

freebird, an R package to evaluate a high-dimensional surrogate marker using a parametric approach, written by Dr. Rachel Zhou, on CRAN.

OSsurvival, an R package to nonparametrically estimate the proportion of the treatment effect on a censored primary outcome that is explained by an optimally transformed surrogate marker measured at an earlier time, written by Dr. Xuan Wang, on CRAN.

CMFsurrogate, an R package to estimate the proportion of the treatment effect explained by multiple surrogate markers using a calibrated model fusion approach, written by Dr. Xuan Wang, on CRAN.

hetttest, an R package to test for a treatment effect using surrogate marker information accounting for heterogeneity in the utility of the surrogate, on CRAN.

PTERP, an R package to evaluate the strength of a surrogate marker by via the relative power for the optimally-transformed version of the surrogate, written by Dr. Xuan Wang, on CRAN.

SurrogateBMA, an R package to estimate the proportion of treatment effect explained by the surrogate marker using Bayesian Model Averaging approach, written by Yunshan Duan, on CRAN.

hetsurrSurv, an R package to assess and test for heterogeneity in the utility of a surrogate marker with respect to a baseline covariate using censored data, on GitHub.

SurrogateRank, an R package implementing a rank-based nonparametric approach to evaluate a surrogate marker in a small sample size setting, on CRAN.

SurrogateSeq, an R package implementing group sequential procedures that allow for early stopping of treatment effect testing using a surrogate, on GitHub.

MEDIA
INTERVIEWS

The Texas Scientist
The Daily Texan
National Public Radio (NPR)
Forbes
The Atlantic
NBC's Today Show
KevinMD Podcast

COMMUNITY AND
DIVERSITY
OUTREACH

Empowering Women in Prison, Served as a business mentor and coach during in-prison

events and business competition, Austin, TX, 2022-Present

Girls on the Run, *Promotes girl empowerment by teaching life skills through lessons and running*, Volunteer, Los Angeles, CA, 2012-2013; Austin, TX, 2022-Present

Science Club for Girls, *Fosters excitement, confidence, and literacy in STEM for girls and young women from underrepresented communities with free, experiential community-based programs*, Volunteer Mentor, East Cambridge, MA, Fall 2009

Nike Women's Marathon, Training Volunteer, Palo Alto, CA, Summer 2006

Girlstart, *Empowering girls in science, math, and technology*, Volunteer Mentor, Austin, TX, Summer 2004

ATHLETIC
ACTIVITIES

MFC CrossFit Championship, Fort Wayne, Indiana, October 2022

CrossFit Level 1 Trainer, 2021-Present

Completed Marathons: Los Angeles 2013, New York 2010, Austin 2010, Houston 2008, Napa Valley 2007

Completed Olympic Triathlons: Malibu 2009, Los Angeles 2008

Stanford Women's Rowing Alumni Eight, Head of the Charles 2009, 4th place

Harvard Dudley IM Rowing Team Member, Spring 2009-Spring 2010

Harvard Dudley IM Swimming Team Member, Spring 2009-Spring 2010

Stanford Pacific Coast Rowing Champion, Novice Four, 2006

Stanford Rowing Team, 2005-2006, May 2006 NCAA participant