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A. Education/Training

- 1991-1995 Department of Mathematics, Nankai University, Tianjin, P.R. China
Degree obtained: B.Sc.
- 1995-1998 Department of Mathematics, Nankai University, Tianjin, P.R. China
Degree obtained: M.Sc.
- 1998-2002 Department of Biostatistics, Harvard University, Boston, MA
Degree obtained: Sc. D.

B. Positions and Honors

Positions and Employment

- 8/2002 – 6/2004 Biostatistician/Postdoctoral research fellow,
Center for Biostatistics in AIDS Research,
Harvard School of Public Health, Boston, MA
- 7/2004 – 10/2008 Assistant Professor,
Department of Preventive Medicine,
Northwestern University, Feinberg School of Medicine, Chicago, IL
- 11/2008 – 2/2013 Assistant Professor,
Department of Health Research and Policy,
Stanford University, School of Medicine, Palo Alto, CA
- 3/2013 – 9/2015 Associate Professor,
Department of Health Research and Policy,
Stanford University, School of Medicine, Palo Alto, CA
- 10/2015 – 6/2019 Associate Professor,
Department of Biomedical Data Science,
Stanford University, School of Medicine, Palo Alto, CA
- 7/2019 – Professor,
Department of Biomedical Data Science,
Stanford University, School of Medicine, Palo Alto, CA

Honors

- 1991-1998 Wangkechang Scholarship,
Nankai University, Tianjin, P.R. China
- 1999-2002 Howard Hughes Fellowship,
Howard Hughes Institute, Boston, MA
- 2000 Robert B. Reed Award for Excellency in Biostatistics,
Harvard School of Public Health, Boston, MA
- 2000-2002 Distinction in Teaching Award,
Harvard School of Public Health, Boston, MA

C. Publications

C.1 Research Publications:

1. Forster AM, **Tian L**, and Wei LJ. Estimation for the Box-Cox Transformation Model without Assuming Parametric Error Distribution. *Journal of the American Statistical Association (JASA)*, 2001; 96: 1097-1101.
2. Chung SK, **Tian L**, Wei LJ, and Dodson TB. Kaplan-Meier Analysis of Dental Implant Survival: A Strategy for Estimating Survival with Clustered Observations. *Journal of Dental Research*, 2001; 80: 2016-2020.
3. Chuang SK, **Tian L**, Wei LJ, and Dodson TB. Prediction Dental Implant Survival Given Clustered Observations Using Semi-Parametric Survival Methods. *Journal of Dental Research*, 2001; 81: 851-855.
4. Park PJ and **Tian L**. Linking Gene Expression Data with Patient Survival Time Using Partial Least Squares. *Bioinformatics*, 2002; 18: 120S-127S.
5. Xu X, **Tian L**, and Wei LJ. Combining Tests for Linkage or Association across Multiple Phenotypic Traits. *Biostatistics*, 2003;4: 223-229.
6. **Tian L**, Wang W, and Wei LJ. Estimating Predictors for Long- or Short-term Survivors. *Biometrics*, 2003; 59: 1008-1015
7. Goldwasser MA, **Tian L**, and Wei LJ. Statistical Inference for Infinite Dimensional Parameters via Asymptotically Pivotal Estimating Functions. *Biometrika*, 2004; 91: 81-94.
8. Zhong S, **Tian L**, Li C, Storch FK, and Wong WH. Comparative Analysis of Gene Sets in the Gene Ontology Space under the Multiple Hypothesis Testing Framework. *Proc. IEEE Comp Systems Bioinformatics*. 2004, 425-435.
9. **Tian L**, Liu J, Zhao M, and Wei LJ. Statistical Inferences Based on Non-smooth Estimating Functions. *Biometrika*, 2004, 91:943-954.

10. **Tian L**, Zucker D, and Wei LJ. On the Proportional Hazards Model with Time-varying Regression Coefficients. *Journal of the American Statistical Association (JASA)*, 2004, 100:172-183.
11. Cai T, **Tian L**, and Wei LJ. Semiparametric Box-Cox Power Transformation Models for Censored Survival Observations, *Biometrika*, 2005, 92: 619-632.
12. **Tian L**, Greenberg S, Kong SW, Altschuler J, Kohane IS, and Park P. Discovering Statistically Significant Pathways in Expression Profiling Studies, *Proceedings of National Academy of Sciences (PNAS)*, 2005, 102: 13544-13549.
13. Uno H, **Tian L**, and Wei LJ. The Optimal Confidence Region for a Random Parameter, *Biometrika*, 2005, 92: 957-964.
14. Sanchez L, Imperato J, Delapena J, Shapiro N, and **Tian L**, Accuracy of Weight Estimation by ED Personnel, *American Journal of Emergency Medicine*, 2005, 915-916.
15. McDermott M, Guralnik J, Ferrucci L, Criqui M, Greenland P, **Tian L**, Liu K, and Tan J. Functional Decline in Lower-extremity Peripheral Arterial Disease: Associations with Comorbidity, Gender and Race. *J Vas Surg*. 2005, 42: 1131-7.
16. McDermott M, Ferrucci L, Liu K, Criqui MH, Greenland P, Green D, Guralnik JM, Ridker PM, Talyor LM, Rifai N, **Tian L**, Zheng J, Pearce WH, Schneider JR, and Vonesh E. D-dimer and Inflammatory Markers as Predictors of Functional Decline in Men and Women with and without Peripheral Arterial Disease. *J Am Geriatr Soc*. 2005, 1688-96.
17. Park Y, **Tian L**, and Wei LJ. One- and two-sample Nonparametric Inference Procedures in the Presence of a Mixture of Independent and Dependent Censoring. *Biostatistics*, 2006; 7: 268-285.
18. **Tian L** and Cai T. On Accelerated Failure Time Model for Current Status and Interval Censored Data, *Biometrika*, 2006; 93: 329-242.
19. **Tian L** and Lagakos S. Analysis of a Partially Observed Binary Covariate Process and a Censored Failure Time in the Presence of Truncation and Competing Risks, *Biometrics*, 2006; 62: 821-828.
20. McDermott M, Liu K, Ferrucci L, Criqui MH, Greenland P, Guralnik JM, **Tian L**, Schneider JR, Pearce WH, Tan J, Martin GJ. Physical Performance in Peripheral Arterial Disease: A Slower Rate of Decline in Patients Who Walk More. *Ann Intern Med*. 2006 Jan 3; 144(1): 10-20.
21. Garg PK, **Tian L**, Criqui MH, Liu K, Ferrucci L, Tan J, and McDermott MM. Physical Activity During Daily Life and Mortality in Patients with Peripheral Arterial Disease. *Circulation*, 2006, 114(3):242-248.
22. McDermott MM, Criqui MH, Guralnik JM, **Tian L**, Liu K, Greenland P, Tan J, Schneider JR, Clark E, and Pearce WH. Obesity, Weight Change, and Functional Decline in Peripheral Arterial Disease. *J Vasc Surg*, 2006, 43(6):1198-1204.
23. McDermott MM, Liu K, Guralnik JM, Ferrucci L, Green D, Greenland P, **Tian L**, Criqui MH, Lo C, Rifai N, Ridker PM, Zheng J, and Pearce W. Functional Decline in Patients with and without

Peripheral Arterial Disease: Predictive Value of Annual Changes in Levels of C-reactive Protein and D-dimer. *J Gerontol A Bio Sci Med Sci.* 2006, 61(4):374-379.

24. Giri J, McDermott MM, Greenland P, Guralnik JM, Criqui MH, Liu K, Ferrucci L, Green D, Schneider JR, and **Tian L**, Statin use and functional decline in patients with and without peripheral arterial disease. *J Am Coll Cardiol.* 2006, 47(5):998-1004.
25. Epstein SK and **Tian L**. Development of an emergency department work score to predict ambulance diversion, *Acad Emerg Med.* 2006 Apr;13(4):421-6.
26. **Tian L** and Liu K. Logistic versus log-binomial regression: response to "Easy SAS Calculations for Risk or Prevalence Ratios and Differences, *Am J Epidemiol.* 2006 Jun 15; 163(12):1157-8.
27. McDermott MM, Sufit R, Nishida T, Guralnik JM, Ferrucci L, **Tian L**, Liu K, Tan J, Pearce WH, Schneider JR, Sharma L, and Criqui MH. Lower extremity nerve function in patients with lower extremity ischemia. *Arch Intern Med.* 2006 Oct 9; 166(18):1986-92.
28. Lloyd-Jones DM, Liu K, **Tian L**, and Greenland P. Narrative Review: Assessment of C-reactive Protein in Risk Prediction for Cardiovascular Disease, *Annals of Internal Medicine*, 2006, 145(1):35-42.
29. **Tian L** and Huang J. Two-part Model for Analyzing Medical Cost Data in the Presence of Right Censoring, 2007, *Statistics in Medicine*, 23:4273-4292.
30. Uno H, Cai T, **Tian L**, and Wei LJ. Evaluating Prediction Rules for t-year Survivors with Censored Regression Models, *JASA*, 2007, 102:527-537.
31. **Tian L**, Cai T, Goetghebeur E, and Wei LJ. Model Evaluation Based on the Sampling Distribution of Estimated Absolute Prediction Error, *Biometrika*, 2007; 94: 297-311.
32. **Tian L**, Liu J, and Wei LJ. Implementation of Estimating Function Based Statistical Inferences via MCMC Samplers (with Discussion), *JASA*, 102:881-900, 2007
33. Ruo B, Liu K, **Tian L**, Tan J, Ferrucci L, Guralnik JM, and McDermott MM. Persistent Depressive Symptoms and Functional Decline Among Patients with Peripheral Arterial Disease, *Psychosom Med*, 2007 Jun;69(6):415-24.
34. McDermott MM, Hoff F, Ferrucci L, Pearce WH, Guralnik J, **Tian L**, Liu K, Schneider J, Sharma L, Tan J, and Criqui MH. Lower extremity ischemia, calf skeletal muscle characteristics, and functional impairment in peripheral arterial disease. *J Am Geriatr Soc.* 2007 Mar; 55 (3):400-6 17341243.
35. McDermott MM, Guralnik JM, Ferrucci L, **Tian L**, Pearce WH, Hoff F, Liu K, Liao Y, and Criqui MH. Physical activity, walking exercise, and calf skeletal muscle characteristics in patients with peripheral arterial disease. *J Vasc Surg.* 2007 Jul; 46(1):87-93.
36. McDermott MM, Guralnik JM, **Tian L**, Ferrucci L, Liu K, Liao Y, and Criqui MH. Baseline functional performance predicts the rate of mobility loss in persons with peripheral arterial disease. *J AM Coll Cardiol.* 2007 Sep4; 50(10):974-82.

37. McDermott MM, Ferrucci L, Guralnik JM, **Tian L**, Green D, Liu K, Tan J, Liao Y, Pearce WH, Schneider JR, Ridker P, Rifai N, Hoff F, and Criqui MH. Elevated levels of inflammation, d-dimer, and homocysteine are associated with adverse calf muscle characteristics and reduced calf strength in peripheral arterial disease. *J Am Coll Cardiol*. 2007 Aug 28; 50(9):897-905.
38. Cai T, **Tian L**, Solomon S, and Wei LJ. Predicting Future Responses based on Possibly Misspecified Working Models, *Biometrika*, 95: 75-92, 2008.
39. Vidula H, **Tian L**, Liu K, Criqui MH, Ferrucci L, Pearce WH, Greenland P, Green D, Tan J, Garside DB, Guralnik J, Ridker PM, Rifai N, and McDermott MM. Biomarkers of Inflammation and D-Dimer as Predictors of Near-Term Versus Long-Term Mortality in Patients with Peripheral Arterial Disease: A Cohort Study. *J Intern Med*. 2008. 148:85-93
40. Rejeski WJ, **Tian L**, Liao Y, McDermott MM. Social cognitive constructs and the promotion of physical activity in patients with peripheral artery disease. *J Cardiopulm Rehabil Prev*. 2008 Jan-Feb; 28(1):65-72.
41. Craft LL, Guralnik JM, Ferrucci L, Liu K, **Tian L**, Criqui MH, Tan J, McDermott MM. Physical activity during daily life and circulating biomarker levels in patients with peripheral arterial disease. *Am J Cardiol*. 2008 Nov 1; 102(9):1263-8.
42. McDermott MM, **Tian L**, Liu K, Guralnik JM, Ferrucci L, Tan J, Pearce WH, Schneider JR, Criqui MH. Prognostic value of functional performance for mortality in patients with peripheral artery disease. *J Am Coll Cardiol*. 2008 Apr 15; 51(15):1482-9.
43. Craft LL, Guralnik JM, Ferrucci L, Liu K, **Tian L**, Criqui MH, Tan J, McDermott MM. Physical activity during daily life and circulating biomarker levels in patients with peripheral arterial disease. *Am J Cardiol*. 2008 Nov 1; 102(9):1263-8.
44. Green D, McMahon B, Foiles N, **Tian L**. Measurement of hemostatic factors in EDTA plasma. *Am J Clin Pathol*. 2008 Nov; 130(5):811-5.
45. **Tian L**, Cai T, and Wei LJ. Identifying Subjects Who Benefit from Additional Information for Better Prediction of the Outcome Variables, *Biometrics*, 2009, 65:894-902.
46. Cai T, Huang J, and **Tian L**. Regularized Estimation for the Accelerated Failure Time Model, *Biometrics*, 65:394-404, 2009.
47. **Tian L**, Cai T, Pfeffer M, Piankov N, Cremieux P and Wei LJ. Exact and Efficient Inference Procedure for Meta-analysis And Its Application to the Analysis of Independent 2 x 2 Tables with All Available Data but Without Artificial Continuity Correction. *Biostatistics*, 10:275-281, 2009
48. McDermott MM, Guralnik JM, **Tian L**, Liu K, Ferrucci L, Liao Y, Sharma L, Criqui MH. Associations of borderline and low normal ankle-brachial index values with functional decline at 5-year follow-up: the WALCS (Walking and Leg Circulation Study). *J Am Coll Cardiol*. 2009 Mar 24; 53(12):1056-62.
49. Herman SD, Liu K, **Tian L**, Guralnik JM, Ferrucci L, Criqui MH, Liao Y, McDermott MM. Baseline lower extremity strength and subsequent decline in functional performance at 6-year

follow-up in persons with lower extremity peripheral arterial disease. *J Am Geriatr Soc.* 2009 Dec; 57(12):2246-52.

50. Garg PK, Liu K, **Tian L**, Guralnik JM, Ferrucci L, Criqui MH, Tan J, McDermott MM. Physical activity during daily life and functional decline in peripheral arterial disease. *Circulation.* 2009 Jan 20; 119(2):251-60.
51. Wang R, **Tian L**, Cai T and Wei LJ, Nonparametric Inference Procedure for Percentiles of the Random Effect Distribution in Meta Analysis. *Annals of Applied Statistics*, 4:520-532, 2010
52. Cai T, **Tian L**, Uno H, Solomon S, and Wei LJ, Calibrating Parametric Subject-Specific Risk Estimation. *Biometrika*, 97(2):389-404, 2010
53. Wallia A, Parikh ND, Molitch ME, Mahler E, **Tian L**, Huang JJ, Levitsky J. Post-transplant hyperglycemia is associated with increased risk of liver allograft rejection. *Transplantation.* 2010 Jan 27; 89(2):222-6.
54. Thenappan T, Shah SJ, Rich S, **Tian L**, Archer SL, Gomberg-Maitland M. Survival in pulmonary arterial hypertension: a reappraisal of the NIH risk stratification equation. *Eur Respir J.* 2010 May; 35(5):1079-87.
55. Vidula H, **Tian L**, Liu K, Criqui MH, Ferrucci L, Guralnik JM, Green D, Ridker P, McDermott MM. Comparison of effects of statin use on mortality in patients with peripheral arterial disease with versus without elevated C-reactive protein and d-dimer levels. *Am J Cardiol.* 2010 May 1; 105(9):1348-52.
56. McDermott MM, Ferrucci L, Liu K, Guralnik JM, **Tian L**, Liao Y, Criqui MH. Leg symptom categories and rates of mobility decline in peripheral arterial disease. *J Am Geriatr Soc.* 2010 Jul; 58(7):1256-62.
57. Singh N, Liu K, **Tian L**, Criqui MH, Guralnik JM, Ferrucci L, Liao Y, McDermott MM. Leg strength predicts mortality in men but not in women with peripheral arterial disease. *J Vasc Surg.* 2010 Sep; 52(3):624-31.
58. **Tian L** and Tibshirani R, Adaptive Index Model for Marker-based Risk Stratification, *Biostatistics*, *Biostatistics* 2011, 12(1): 68-86.
59. **Tian L**, Cai T, R. Wang and L.J. Wei, the Highest Confidence Density Region and its Usage for Joint Inferences about Constrained Parameters, *Biometrics*, 2011 67(2):604-610.
60. Li Y, **Tian L** and Wei LJ, Estimating Subject-Specific Dependent Competing Risk Profile with Censored Event Time Observations, *Biometrics*, 2011 67(2):427-35.
61. Uno H, Cai T, **Tian L** and Wei LJ, Graphical Procedures for Evaluating Overall and Subject-specific Incremental Values from New Predictors with Censored Event Time Data. *Biometrics.* 2011 Dec; 67(4):1389-96.
62. Cai T and **Tian L**, Analysis of Randomized Comparative Clinical Trial Data for Personalized Treatment Selections. *Biostatistics.* 2011 12(2):270-282.

63. Zhao XG, Yi L, Dai W, and **Tian L**, AUC based Biomarker Ensemble with an Application on Gene Scores Predicting Low Bone Mineral Density, *Bioinformatics*, 2011, 27(21): 3050-3055.
64. McDermott MM, Ferrucci L, Liu K, Guralnik JM, **Tian L**, Kibbe M, Liao Y, Tao H, Criqui MH. Women with peripheral arterial disease experience faster functional decline than men with peripheral arterial disease. *J Am Coll Cardiol*. 2011 Feb 8; 57(6):707-14.
65. Pysz MA, Foygel K, Panje CM, Needles A, **Tian L**, Willmann JK. Assessment and monitoring tumor vascularity with contrast-enhanced ultrasound maximum intensity persistence imaging. *Invest Radiol*. 2011 Mar; 46(3):187-95.
66. Darsaut TE, Darsaut NM, Chang SD, Silverberg GD, Shuer LM, **Tian L**, Dodd RL, Do HM, Marks MP, Steinberg GK., Predictors of clinical and angiographic outcome after surgical or endovascular therapy of very large and giant intracranial aneurysms. *Neurosurgery*. 2011 Apr; 68(4):903-15.
67. Wallia A, Parikh ND, O'Shea-Mahler E, Schmidt K, DeSantis AJ, **Tian L**, Levitsky J, Molitch ME. Glycemic control by a glucose management service and infection rates after liver transplantation. *Endocr Pract*. 2011 Jul-Aug; 17(4):546-51.
68. McDermott MM, Liu K, Ferrucci L, **Tian L**, Guralnik JM, Tao H, Ridker PM, Criqui MH. Relation of interleukin-6 and vascular cellular adhesion molecule-1 levels to functional decline in patients with lower extremity peripheral arterial disease. *Am J Cardiol*. 2011 May 1; 107(9):1392-8.
69. McDermott MM, Liu K, Ferrucci L, **Tian L**, Guralnik JM, Liao Y, Criqui MH. Greater sedentary hours and slower walking speed outside the home predict faster declines in functioning and adverse calf muscle changes in peripheral arterial disease. *J Am Coll Cardiol*. 2011 Jun 7; 57(23):2356-64.
70. McDermott MM, Liu K, Carroll TJ, **Tian L**, Ferrucci L, Li D, Carr J, Guralnik JM, Kibbe M, Pearce WH, Yuan C, McCarthy W, Kramer CM, Tao H, Liao Y, Clark ET, Xu D, Berry J, Orozco J, Sharma L, Criqui MH. Superficial femoral artery plaque and functional performance in peripheral arterial disease: walking and leg circulation study (WALCS III). *JACC Cardiovasc Imaging*. 2011 Jul; 4(7):730-9.
71. Lan WC, Priestley M, Mayoral SR, **Tian L**, Shamloo M, Penn AA. Sex-specific cognitive deficits and regional brain volume loss in mice exposed to chronic, sublethal hypoxia. *Pediatr Res*. 2011 Jul; 70(1):15-20.
72. McDermott MM, Liu K, Carroll TJ, **Tian L**, Ferrucci L, Li D, Carr J, Guralnik JM, Kibbe M, Pearce WH, Yuan C, McCarthy W, Kramer CM, Tao H, Liao Y, Clark ET, Xu D, Berry J, Orozco J, Sharma L, Criqui MH. Superficial femoral artery plaque and functional performance in peripheral arterial disease: walking and leg circulation study (WALCS III). *JACC Cardiovasc Imaging*. 2011 Jul; 4(7):730-9.
73. Garg PK, Liu K, Ferrucci L, Guralnik JM, Criqui MH, **Tian L**, Sufit R, Nishida T, Tao H, Liao Y, McDermott MM., Lower extremity nerve function, calf skeletal muscle characteristics, and functional performance in peripheral arterial disease. *J Am Geriatr Soc*. 2011 Oct; 59(10):1855-63.

74. Minnier J., **Tian L** and Cai T. A Perturbation Method for Inference on Regularized Regression Estimates. *JASA*, (2012). 106(496):1371-1382
75. **Tian L**, Cai T, Zhao L and Wei LJ, On the Covariate-adjusted Estimation for an Overall Treatment Difference with Data from a Randomized Comparative Clinical Trial. *Biostatistics*. 2012 Apr; 13(2):256-73.
76. Han Z, **Tian L**, Pécot T, Huang T, Machiraju R, Huang K. A signal processing approach for enriched region detection in RNA polymerase II ChIP-seq data. *BMC Bioinformatics*. 2012 Mar 13; 13 Suppl 2:S2.
77. Deshpande N, Lutz AM, Ren Y, Foygel K, **Tian L**, Schneider M, Pai R, Pasricha PJ, Willmann JK. Quantification and Monitoring of Inflammation in Murine Inflammatory Bowel Disease with Targeted Contrast-enhanced US. *Radiology*. 2012 Jan; 262(1):172-80.
78. Van Horn L, **Tian L**, Neuhouser M, Howard B, Eaton C, Snetselaar L, Matthan N, Lichtenstein A. Dietary Patterns are Associated with Disease Risk among Participants in The Women's Health Initiative Observational Study. *Nutrition. J Nutr*. 2012 Feb; 142(2):284-91.
79. Ren Y, Fleischmann D, Foygel K, Molvin L, Lutz AM, Koong AC, Jeffrey RB, **Tian L**, Willmann JK. Antiangiogenic and radiation therapy: early effects on in vivo computed tomography perfusion parameters in human colon cancer xenografts in mice. *Invest Radiol*. 2012 Jan; 47(1):25-32.
80. Pysz MA, Guracar I, Foygel K, **Tian L**, Willmann JK. Quantitative assessment of tumor angiogenesis using real-time motion-compensated contrast-enhanced ultrasound imaging. *Angiogenesis*. 2012 Apr 26. In press
81. Raval Z, Liu K, **Tian L**, Ferrucci L, Guralnik JM, Liao Y, Criqui MH, McDermott MM. Higher body mass index is associated with more adverse changes in calf muscle characteristics in peripheral arterial disease. *J Vasc Surg*. 2012 Apr; 55(4):1015-24.
82. McDermott MM, Liu K, **Tian L**, Guralnik JM, Criqui MH, Liao Y, Ferrucci L. Calf muscle characteristics, strength measures, and mortality in peripheral arterial disease: a longitudinal study. *J Am Coll Cardiol*. 2012 Mar 27; 59(13):1159-67.
83. Reis BY, Olson KL, **Tian L**, Bohn RL, Brownstein JS, Park PJ, Cziraky MJ, Wilson MD, Mandl KD. A pharmacoepidemiological network model for drug safety surveillance: statins and rhabdomyolysis. *Drug Saf*. 2012 May 1; 35(5):395-406.
84. Jain A, Liu K, Ferrucci L, Criqui MH, **Tian L**, Guralnik JM, Tao H, McDermott MM. The Walking Impairment Questionnaire stair-climbing score predicts mortality in men and women with peripheral arterial disease. *J Vasc Surg*. 2012 Jun; 55(6):1662-1673.e2.
85. McDermott MM, Liu K, Ferrucci L, **Tian L**, Guralnik J, Kopp P, Tao H, Van Horn L, Liao Y, Green D, Kibbe M, Criqui MH. Vitamin D status and functional performance in peripheral artery disease. *Vasc Med*. 2012 Oct; 17(5):294-302.
86. Zhao L, **Tian L**, Uno H, Solomon SD, Pfeffer MA, Schindler JS, Wei LJ. Utilizing the integrated difference of two survival functions to quantify the treatment contrast for designing, monitoring, and analyzing a comparative clinical study. *Clin Trials*. 2012 Oct; 9(5):570-7.

87. Pysz MA, Guracar I, **Tian L**, Willmann JK. Fast microbubble dwell-time based ultrasonic molecular imaging approach for quantification and monitoring of angiogenesis in cancer. *Quant Imaging Med Surg.* 2012 Jun; 2(2):68-80.
88. McDermott MM, Domanchuk K, Liu K, Guralnik JM, **Tian L**, Criqui MH, Ferrucci L, Kibbe M, Jones DL, Pearce WH, Zhao L, Spring B, Rejeski WJ. The Group Oriented Arterial Leg Study (GOALS) to improve walking performance in patients with peripheral arterial disease. *Contemp Clin Trials.* 2012 Nov; 33(6):1311-20.
89. Panje CM, Wang DS, Pysz MA, Paulmurugan R, Ren Y, Tranquart F, **Tian L**, Willmann JK. Ultrasound-mediated gene delivery with cationic versus neutral microbubbles: effect of DNA and microbubble dose on in vivo transfection efficiency. *Theranostics.* 2012; 2(11):1078-91.
90. Uno H, **Tian L**, Cai T, Kohane IS, Wei LJ. A unified inference procedure for a class of measures to assess improvement in risk prediction systems with survival data. *Stat Med.* 2013 Jun 30; 32(14):2430-42.
91. Zhao L, **Tian L**, Cai T, Claggett B, Wei LJ. Effectively selecting a target population for future comparative study. *J Am Stat Assoc.* 2013 Jan 1; 108(502):527-539.
92. Bachawal SV, Jensen KC, Lutz AM, Gambhir SS, Tranquart F, **Tian L**, Willmann JK. Earlier detection of breast cancer with ultrasound molecular imaging in a transgenic mouse model. *Cancer Res.* 2013 Mar 15; 73(6):1689-98.
93. McDermott MM, Kibbe M, Guralnik JM, Pearce WH, **Tian L**, Liao Y, Zhao L, Criqui MH. Comparative effectiveness study of self-directed walking exercise, lower extremity revascularization, and functional decline in peripheral artery disease. *J Vasc Surg.* 2013 Apr; 57(4):990-996.
94. Wang H, Machtaler S, Bettinger T, Lutz AM, Luong R, Bussat P, Gambhir SS, Tranquart F, **Tian L**, Willmann JK. Molecular imaging of inflammation in inflammatory bowel disease with a clinically translatable dual-selectin-targeted US contrast agent: comparison with FDG PET/CT in a mouse model. *Radiology.* 2013 Jun; 267(3):818-29.
95. Doufas AG, **Tian L**, Padrez KA, Suwanprathes P, Cardell JA, Maecker HT, Panousis P. Experimental pain and opioid analgesia in volunteers at high risk for obstructive sleep apnea. *PLoS One.* 2013; 8(1):e54807.
96. Jain A, Liu K, Ferrucci L, Criqui MH, **Tian L**, Guralnik JM, Tao H, McDermott MM. Declining walking impairment questionnaire scores are associated with subsequent increased mortality in peripheral artery disease. *J Am Coll Cardiol.* 2013 Apr 30; 61(17):1820-9.
97. Ji J, Ling J, Jiang H, Wen Q, Whitin JC, **Tian L**, Cohen HJ, Ling XB. Cloud-based solution to identify statistically significant MS peaks differentiating sample categories. *BMC Res Notes.* 2013 Mar 23; 6:109.
98. Cashman KD, Kiely M, Kinsella M, Durazo-Arvizu RA, **Tian L**, Zhang Y, Lucey A, Flynn A, Gibney MJ, Vesper HW, Phinney KW, Coates PM, Picciano MF, Semplos CT. Evaluation of Vitamin D Standardization Program protocols for standardizing serum 25-hydroxyvitamin D

data: a case study of the program's potential for national nutrition and health surveys. *Am J Clin Nutr.* 2013 Jun; 97(6):1235-42.

99. McDermott MM, Carroll TJ, Kibbe M, Kramer CM, Liu K, Guralnik JM, Keeling AN, Criqui MH, Ferrucci L, Yuan C, **Tian L**, Liao Y, Berry J, Zhao L, Carr J. Proximal superficial femoral artery occlusion, collateral vessels, and walking performance in peripheral artery disease. *JACC Cardiovasc Imaging.* 2013 Jun; 6(6):687-94.
100. Kohrt HE, **Tian L**, Li L, Alizadeh AA, Hsieh S, Tibshirani RJ, Strober S, Sarwal M, Lowsky R. Identification of gene microarray expression profiles in patients with chronic graft-versus-host disease following allogeneic hematopoietic cell transplantation. *Clin Immunol.* 2013 Jul; 148(1):124-35.
101. Foygel K, Wang H, Machtaler S, Lutz AM, Chen R, Pysz M, Lowe AW, **Tian L**, Carrigan T, Brentnall TA, Willmann JK. Detection of pancreatic ductal adenocarcinoma in mice by ultrasound imaging of thymocyte differentiation antigen 1. *Gastroenterology.* 2013 Oct; 145(4):885-894.
102. McDermott MM, Liu K, Guralnik JM, Criqui MH, Spring B, **Tian L**, Domanchuk K, Ferrucci L, Lloyd-Jones D, Kibbe M, Tao H, Zhao L, Liao Y, Rejeski WJ. Home-based walking exercise intervention in peripheral artery disease: a randomized clinical trial. *JAMA.* 2013 Jul 3; 310(1):57-65.
103. Sutherland SM, Ji J, Sheikhi FH, Widen E, **Tian L**, Alexander SR, Ling XB. AKI in hospitalized children: epidemiology and clinical associations in a national cohort. *Clin J Am Soc Nephrol.* 2013 Oct; 8(10):1661-9.
104. Doufas AG, **Tian L**, Davies MF, Warby SC. Nocturnal intermittent hypoxia is independently associated with pain in subjects suffering from sleep-disordered breathing. *Anesthesiology.* 2013 Nov; 119(5):1149-62.
105. Seok J, **Tian L**, Wong WH. Density estimation on multivariate censored data with optional Pólya tree. *Biostatistics.* 2014 Jan; 15(1):182-95
106. **Tian L**, Zhao L, Wei LJ. Predicting the restricted mean event time with the subject's baseline covariates in survival analysis. *Biostatistics.* 2014 Apr; 15(2):222-33.
107. Parast L, **Tian L**, Cai T. Landmark Estimation of Survival and Treatment Effect in a Randomized Clinical Trial. *J Am Stat Assoc.* 2014 Jan 1; 109(505):384-394.
108. Uno H, Claggett B, **Tian L**, Inoue E, Gallo P, Miyata T, Schrag D, Takeuchi M, Uyama Y, Zhao L, Skali H, Solomon S, Jacobus S, Hughes M, Packer M, Wei LJ. Moving beyond the hazard ratio in quantifying the between-group difference in survival analysis. *J Clin Oncol.* 2014 Aug 1; 32(22):2380-5.
109. **Tian L**, Durazo-Arvizu RA, Myers G, Brooks S, Sarafin K, Sempos CT. The estimation of calibration equations for variables with heteroscedastic measurement errors. *Stat Med.* 2014 Nov 9; 33(25):4420-36.

110. Claggett B, **Tian L**, Castagno D, Wei LJ. Treatment selections using risk-benefit profiles based on data from comparative randomized clinical trials with multiple endpoints. *Biostatistics*. 2014 16(1):60-72.
111. **Tian L**, A Alizadeh, A Gentles and Tibshirani R, A simple method to estimating the interaction between a treatment and a large number of covariates, *J Am Stat Assoc*. 2014, 109(508):1517-1532.
112. Claggett B, Minge Xie and **Tian L**. Meta analysis with fixed, unknown, study-specific parameters. *Biostatistics*. *J Am Stat Assoc*. 2014, 109:1660-1671.
113. McDermott MM, Liu K, Ferrucci L, **Tian L**, Guralnik J, Kopp P, Van Horn L, Liao Y, Green D, Kibbe M, Sufit R, Zhao L, Criqui MH. Vitamin D status, functional decline, and mortality in peripheral artery disease. *Vasc Med*. 2014 Feb; 19(1):18-26.
114. Rejeski WJ, Spring B, Domanchuk K, Tao H, **Tian L**, Zhao L, McDermott MM. A group-mediated, home-based physical activity intervention for patients with peripheral artery disease: effects on social and psychological function. *J Transl Med*. 2014 Jan 28; 12:29.
115. Altmann A, **Tian L**, Henderson VW, Greicius MD; Alzheimer's disease Neuroimaging Initiative Investigators. Sex modifies the APOE-related risk of developing Alzheimer disease. *Ann Neurol*. 2014 Apr; 75(4):563-73.
116. McDermott MM, Greenland P, Liu K, **Tian L**, Green D, Shah SJ, Huffman M, Wilkins J, Kibbe M, Liao Y, Huang CC, Skelly C, Jacobs C, McCarthy W, Auerbach A, and Lloyd-Jones D. Vulnerable blood in high risk vascular patients: Study design and methods. *Contemp Clin Trials*. 2014 May; 38(1):121-9.
117. McDermott MM, Guralnik JM, Criqui MH, Ferrucci L, Zhao L, Liu K, Domanchuk K, Spring B, **Tian L**, Kibbe M, Liao Y, Lloyd Jones D, Rejeski WJ. Home-based walking exercise in peripheral artery disease: 12-month follow-up of the goals randomized trial. *J Am Heart Assoc*. 2014 May 21; 3(3):e000711.
118. McDermott MM, Carr J, Liu K, Kramer CM, Yuan C, **Tian L**, Criqui MH, Guralnik JM, Ferrucci L, Zhao L, Xu D, Kibbe M, Berry J, Carroll TJ. Collateral vessel number, plaque burden, and functional decline in peripheral artery disease. *Vasc Med*. 2014 Jul 21; 19(4):281-288.
119. Polonsky TS, Liu K, **Tian L**, Carr J, Carroll TJ, Berry J, Criqui MH, Ferrucci L, Guralnik JM, Kibbe MR, Kramer CM, Li F, Xu D, Zhao X, Yuan C, McDermott MM. High-risk plaque in the superficial femoral artery of people with peripheral artery disease: Prevalence and associated clinical characteristics. *Atherosclerosis*. 2014 Sep 2; 237(1):169-176.
120. Wilson KE, Bachawal SV, **Tian L**, Willmann JK. Multiparametric spectroscopic photoacoustic imaging of breast cancer development in a transgenic mouse model. *Theranostics*. 2014 Aug 15; 4(11):1062-71.
121. Forbang NI, McDermott MM, Liao Y, Ix JH, Allison MA, Liu K, **Tian L**, Evans N, Criqui MH. Associations of diabetes mellitus and other cardiovascular disease risk factors with decline in the ankle-brachial index. *Vasc Med*. 2014 Dec; 19(6):465-72.

122. Polonsky TS, Liu K, **Tian L**, Carr J, Carroll TJ, Berry J, Criqui MH, Ferrucci L, Guralnik JM, Kibbe MR, Kramer CM, Li F, Xu D, Zhao X, Yuan C, McDermott MM. High-risk plaque in the superficial femoral artery of people with peripheral artery disease: prevalence and associated clinical characteristics. *Atherosclerosis*. 2014 Nov; 237(1):169-76.
123. Uno H, Wittes J, Fu H, Solomon SD, Claggett B, **Tian L**, Cai T, Pfeffer MA, Evans SR, Wei LJ., Alternatives to Hazard Ratios for Comparing the Efficacy or Safety of Therapies in Noninferiority Studies. *Ann Intern Med*. 2015 Jul 21; 163(2):127-34.
124. Uno H, **Tian L**, Claggett B, Wei LJ., A versatile test for equality of two survival functions based on weighted differences of Kaplan-Meier curves. *Stat Med*. 2015 Dec 10; 34(28):3680-95.
125. Nakasone H, **Tian L**, Sahaf B, Kawase T, Schoenrock K, Perloff S, Ryan CE, Paul J, Popli R, Wu F, Otani JM, Collier J, Warren EH 3rd, Miklos DB. Allogeneic HY antibodies detected 3 months after female to male sex-mismatched HCT predict chronic GVHD and non-relapse mortality. *Blood*. 2015 Mar 12. pii: blood-2014-11-613323.
126. Wang TY, Choe JW, Pu K, Devulapally R, Bachawal S, Machtaler S, Chowdhury SM, Luong R, **Tian L**, Khuri-Yakub B, Rao J, Paulmurugan R, Willmann JK. Ultrasound-guided delivery of microRNA loaded nanoparticles into cancer. *J Control Release*. 2015 Apr 10; 203:99-108.
127. Padda SK, Riess JW, Schwartz EJ, Tian L, Kohrt, HE, Neal JW, West RB and Wakelee HA. Diffuse high intensity PD-L1 staining in thymic epithelial tumor. *J. Thorac Oncol*. 2015 Mar; 10(3):500-8.
128. Wang H, Kaneko OF, **Tian L**, Hristov D, Willmann JK. Three-dimensional ultrasound molecular imaging of angiogenesis in colon cancer using a clinical matrix array ultrasound transducer. *Invest Radiol*. 2015 May; 50(5):322-9.
129. Wang H, Felt SA, Machtaler S, Guracar I, Luong R, Bettinger T, **Tian L**, Lutz AM, Willmann JK. Quantitative Assessment of Inflammation in a Porcine Acute Terminal Ileitis Model: US with a Molecularly Targeted Contrast Agent. *Radiology*. 2015 Sep; 276(3):809-17.
130. McDermott MM, Guralnik JM, Criqui MH, Ferrucci L, Liu K, Spring B, **Tian L**, Domanchuk K, Kibbe M, Zhao L, Lloyd Jones D, Liao Y, Gao Y, Rejeski WJ. Unsupervised exercise and mobility loss in peripheral artery disease: a randomized controlled trial. *J Am Heart Assoc*. 2015 May 20; 4(5). pii: e001659.
131. Sarafin K, Durazo-Arvizu R, **Tian L**, Phinney KW, Tai S, Camara JE, Merkel J, Green E, Sempos CT, Brooks SP. Standardizing 25-hydroxyvitamin D values from the Canadian Health Measures Survey–3. *The American journal of clinical nutrition*. 2015 Sep 30; 102(5):1044-50.
132. Wang H, Hristov D, Qin J, **Tian L**, Willmann JK. Three-dimensional Dynamic Contrast-enhanced US Imaging for Early Antiangiogenic Treatment Assessment in a Mouse Colon Cancer Model. *Radiology*. 2015 Nov; 277(2):424-34.

133. McDermott MM, Greenland P, **Tian L**, Kibbe MR, Green D, Zhao L, Criqui MH, Guralnik JM, Ferrucci L, Liu K, Wilkins JT, Huffman MD, Shah SJ, Liao Y, Lloyd-Jones DM., Association of 6-Minute Walk Performance and Physical Activity with Incident Ischemic Heart Disease Events and Stroke in Peripheral Artery Disease. *J Am Heart Assoc.* 2015 Jul 28; 4(7). pii: e001846.
134. Machtaler S, Knieling F, Luong R, **Tian L**, Willmann JK., Assessment of Inflammation in an Acute on Chronic Model of Inflammatory Bowel Disease with Ultrasound Molecular Imaging. *Theranostics.* 2015 Aug 8; 5(11):1175-86.
135. Zhao L, Claggett B, **Tian L**, Uno H, Pfeffer MA, Solomon SD, Trippa L, Wei LJ., On the restricted mean survival time curve in survival analysis. *Biometrics.* 2016 Mar; 72(1):215-21.
136. Parast L, Cai T, McDermott MM, **Tian L**., Robust estimation of the proportion of treatment effect explained by surrogate marker information. *Stat Med.* 2016 May 10; 35(10):1637-53.
137. Li J, Zhao L, **Tian L**, Cai T, Claggett B, Callegaro A, Dizier B, Spiessens B, Ulloa-Montoya F, Wei LJ. A predictive enrichment procedure to identify potential responders to a new therapy for randomized, comparative controlled clinical studies. *Biometrics.* 2016 Sep; 72(3):877-87.
138. Cronin A., **Tian L**. and Uno H. strms2 and strms2pw: New commands to compare survival curves using the restricted mean survival time. *The Stata Journal*, 2016; 16(3):1-15.
139. Yong F., **Tian L**., Yu S., Cai T., and Wei, L.J., Optimal stratification in outcome prediction using baseline information, *Biometrika* 2016; 103(4):817-828.
140. Hasegawa T., Claggett B., **Tian L**., and Wei L.J. The myth of making inferences for an overall treatment effect with data from multiple comparative studies via meta-analysis and beyond. *Statistics in Biosciences* 2016; 9(1):1-14.
141. Belitskaya-Levy I, Wang H, Shih MC, **Tian L**, Gheorghe D, Lew R, and Lu Y. A new overall-subgroup simultaneous test for optimal inference in biomarker-targeted confirmatory trials, *Statistics in Biosciences* 2016; 1-27. <https://doi.org/10.1007/s12561-016-9174-8>
142. McDermott MM, Liu K, Green D, Greenland P, **Tian L**, Kibbe M, Tracy R, Shah S, Wilkins JT, Huffman M, Zhao L, Huang CC, Auerbach A, Liao Y, Skelly CL, McCarthy W, Lloyd Jones D., Changes in D-dimer and inflammatory biomarkers before ischemic events in patients with peripheral artery disease: The BRAVO Study. *Vasc Med.* 2016 Feb; 21(1):12-20.
143. Fang F, Yu M, Cavanagh MM, Hutter Saunders J, Qi Q, Ye Z, Le Saux S, Sultan W, Turgano E, Dekker CL, **Tian L**, Weyand CM, Goronzy JJ. Expression of CD39 on Activated T Cells Impairs their Survival in Older Individuals. *Cell Rep.* 2016 Feb 9;14(5):1218-1231.
144. McDermott MM, Guralnik JM, Ferrucci L, **Tian L**, Kibbe MR, Greenland P, Green D, Liu K, Zhao L, Wilkins JT, Huffman MD, Shah SJ, Liao Y, Gao Y, Lloyd-Jones DM, Criqui MH., Community walking speed, sedentary or lying down time, and mortality in peripheral artery disease. *Vasc Med.* 2016 Apr; 21(2):120-9.

145. McDermott MM, Guralnik JM, **Tian L**, Kibbe MR, Ferrucci L, Zhao L, Liu K, Liao Y, Gao Y, Criqui MH. Incidence and Prognostic Significance of Depressive Symptoms in Peripheral Artery Disease. *J Am Heart Assoc.* 2016 Mar 18; 4(3):e002959.
146. Zhou J, Wang H, Zhang H, Lutz AM, **Tian L**, Hristov D, Willmann JK., VEGFR2-targeted three-dimensional ultrasound imaging can predict responses to anti-angiogenic therapy in preclinical models of colon cancer. *Cancer Res.* 2016 May 20 76(14):4081-9.
147. Ratliff JK, Balise R, Veeravagu A, Cole TS, Cheng I, Olshen RA, **Tian L**. Predicting Occurrence of Spine Surgery Complications Using "Big Data" Modeling of an Administrative Claims Database. *J Bone Joint Surg Am.* 2016 May 18; 98(10):824-34.
148. Abou-Elkacem L, Wilson KE, Johnson SM, Chowdhury SM, Bachawal S, Hackel BJ, **Tian L**, Willmann JK. Ultrasound Molecular Imaging of the Breast Cancer Neovasculature using Engineered Fibronectin Scaffold Ligands: A Novel Class of Targeted Contrast Ultrasound Agent. *Theranostics.* 2016 Jun 28; 6(11):1740-52.
149. Shirai T, Nazarewicz RR, Wallis BB, Yanes RE, Watanabe R, Hilhorst M, **Tian L**, Harrison DG, Giacomini JC, Assimes TL, Goronzy JJ, Weyand CM. The glycolytic enzyme PKM2 bridges metabolic and inflammatory dysfunction in coronary artery disease. *J Exp Med.* 2016 Mar 7; 213(3):337-54.
150. Yang Z, Shen Y, Oishi H, Matteson EL, **Tian L**, Goronzy JJ, Weyand CM. Restoring oxidant signaling suppresses proarthritogenic T cell effector functions in rheumatoid arthritis. *Sci Transl Med.* 2016 Mar 23; 8(331):331ra38.
151. Wen Z, Shimojima Y, Shirai T, Li Y, Ju J, Yang Z, **Tian L**, Goronzy JJ, Weyand CM. NADPH oxidase deficiency underlies dysfunction of aged CD8+ Tregs. *J Clin Invest.* 2016 May 2; 126(5):1953-67.
152. Mullick Chowdhury S, Wang TY, Bachawal S, Devulapally R, Choe JW, Abou Elkacem L, Yakub BK, Wang DS, **Tian L**, Paulmurugan R, Willmann JK. Ultrasound-guided therapeutic modulation of hepatocellular carcinoma using complementary microRNAs. *J Control Release.* 2016 Sep 28; 238:272-80.
153. Wang H, Lutz AM, Hristov D, **Tian L**, Willmann JK. Intra-animal comparison between three-dimensional molecularly targeted US and Three-dimensional dynamic contrast-enhanced US for early antiangiogenic treatment assessment in colon cancer. *Radiology.* 2016 Aug 4; 282(2):443-52.
154. Qi, Q., Cavanagh, M. M., Le Saux, S., Namkoong, H., Kim, C., Turgano, E., Liu, Y., Wang, C., Mackey, S., Swan, G. E., Dekker, C. L., Olshen, R. A., Boyd, S. D., Weyand, C. M., **Tian L.**, Goronzy, J. J. Diversification of the antigen-specific T cell receptor repertoire after varicella zoster vaccination. *Science translational medicine* 2016; 8 (332): 332ra46

155. White SH, McDermott MM, Sufit RL, Kosmac K, Bugg AW, Gonzalez-Freire M, Ferrucci L, **Tian L**, Zhao L, Gao Y, Kibbe MR, Criqui MH, Leeuwenburgh C, Peterson CA. Walking performance is positively correlated to calf muscle fiber size in peripheral artery disease subjects, but fibers show aberrant mitophagy: an observational study. *J Transl Med*. 2016 Sep 29; 14(1):284.
156. Qi Q, Cavanagh MM, Le Saux S, Wagar LE, Mackey S, Hu J, Maecker H, Swan GE, Davis MM, Dekker CL, **Tian L**, Weyand CM, Goronzy JJ. Defective T Memory Cell Differentiation after Varicella Zoster Vaccination in Older Individuals. *PLoS Pathog*. 2016 Oct 20;12(10):e1005892.
157. McDermott MM, Kramer CM, **Tian L**, Carr J, Guralnik JM, Polonsky T, Carroll T, Kibbe M, Criqui MH, Ferrucci L, Zhao L, Hippe DS, Wilkins J, Xu D, Liao Y, McCarthy W, Yuan C. Plaque Composition in the Proximal Superficial Femoral Artery and Peripheral Artery Disease Events. *JACC Cardiovasc Imaging*. 2016 Nov 3. pii: S1936-878X(16)30739-2.
158. Binkley N, Dawson-Hughes B, Durazo-Arvizu R, Thamm M, **Tian L**, Merkel JM, Jones JC, Carter GD, Sempos CT. Vitamin D measurement standardization: The way out of the chaos. *J Steroid Biochem Mol Biol*. 2016 Dec 12. pii: S0960-0760(16)30341-7.
159. Peterfy C, Strand V, **Tian L**, Østergaard M, Lu Y, DiCarlo J, Countryman P, Deodhar A, Landewé R, Ranganath VK, Troum O, Conaghan PG. Short-term changes on MRI predict long-term changes on radiography in rheumatoid arthritis: an analysis by an OMERACT Task Force of pooled data from four randomised controlled trials. *Ann Rheum Dis*. 2016 Dec 14. pii: annrheumdis-2016-210311.
160. Parast L, Cai T, **Tian L**. Evaluating surrogate marker information using censored data. *Stat Med* 2017; 36(11):1767-1782.
161. Delmar, P., Cornelia, I., and **Tian L**. Innovative methods for the identification of predictive biomarker signature in oncology: application to Avastin. *International Journal of Clinical Trials* 2017; 5:107-115.
162. Huang X, Sun Y, Chatterjee S, Chakravartty A, **Tian L**, and Devanarayan V. Patient subgroup identification for clinical drug development. *Statistics in Medicine* 2017; 36(9):1414-1428.
163. Pak K, Uno H, Kim DH, **Tian L**, Kane RC, Takeuchi M, Fu H, Claggett B, and Wei LJ. Interpretability of cancer clinical trial results using restricted means survival time as an alternative to hazard ratio. *JAMA Oncol*. 2017; 3(12):1692-1696.
164. **Tian L**, Fu H, Ruberg SJ, Uno H and Wei LJ. Efficiency of two sample tests via the restricted mean survival time for analyzing event time observation. *Biometrics* 2017; doi: 10.1111/biom.12770.
165. Chen S, **Tian L**, Cai T, and Yu M. A general statistical framework for subgroup identification and comparative treatment scoring. *Biometrics* 2017; 73(4):1199-1209.

166. Veeravagu A, Li A, Swinney C, **Tian L**, Moraff A, Azad TD, Cheng I, Alamin T, Hu SS, Anderson RL, Shuer L. Predicting complication risk in spine surgery: a prospective analysis of a novel risk assessment tool. *Journal of Neurosurgery: Spine*. 2017 Apr 21;27(1):81-9
167. McDermott MM, **Tian L**, Wunderink RG, Kalhan R, Kibbe MR, Greenland P, Tracy R, Zhao L, Liu K, Huffman M, Wilkins JT. Pulmonary hospitalizations and ischemic heart disease events in patients with peripheral artery disease. *Vascular Medicine*. 2017 Jun; 22(3):218-24.
168. Sempos CT, Wise SA, Phinney KW, Tai SS, Camara J, Myers GL, Durazo-Arvizu R, **Tian L**, Eckfeldt JH, Hoofnagle AN, Miller WG. Baseline Assessment of 25-hydroxyvitamin D Assay Performance—A Vitamin D Standardization Program (VDSP) Study. 2017 Aug 19.
169. Wilson KE, Bachawal SV, Abou-Elkacem L, Jensen K, Machtaler S, **Tian L**, Willmann JK. Spectroscopic Photoacoustic Molecular Imaging of Breast Cancer using a B7-H3-targeted ICG Contrast Agent. *Theranostics*. 2017; 7(6):1463.
170. Wise SA, Phinney KW, Tai SS, Camara JE, Myers GL, Durazo-Arvizu R, **Tian L**, Hoofnagle AN, Bachmann LM, Young IS, Pettit J. Baseline Assessment of 25-Hydroxyvitamin D Assay Performance: A Vitamin D Standardization Program (VDSP) Interlaboratory Comparison Study. *Journal of AOAC International*. 2017 Sep 1; 100(5):1244-52.
171. McDermott MM, Kramer CM, **Tian L**, Carr J, Guralnik JM, Polonsky T, Carroll T, Kibbe M, Criqui MH, Ferrucci L, Zhao L. Plaque composition in the proximal superficial femoral artery and peripheral artery disease events. *JACC: Cardiovascular Imaging*. 2017 Sep 1; 10(9):1003-12.
172. McDermott MM, Polonsky TS, Kibbe MR, **Tian L**, Zhao L, Pearce WH, Gao Y, Guralnik JM. Racial differences in functional decline in peripheral artery disease and associations with socioeconomic status and education. *Journal of vascular surgery*. 2017 Sep 1; 66(3):826-34.
173. Green D, **Tian L**, Greenland P, Liu K, Kibbe M, Tracy R, Shah S, Wilkins JT, Huffman MD, Liao Y, Lloyd Jones D. Association of the von Willebrand Factor–ADAMTS13 Ratio with Incident Cardiovascular Events in Patients with Peripheral Arterial Disease. *Clinical and Applied Thrombosis/Hemostasis*. 2017 Oct; 23(7):807-13.
174. McDermott MM, Ferrucci L, **Tian L**, Guralnik JM, Lloyd-Jones D, Kibbe MR, Polonsky TS, Domanchuk K, Stein JH, Zhao L, and Taylor D. Effect of granulocyte-macrophage colony-stimulating factor with or without supervised exercise on walking performance in patients with peripheral artery disease: The PROPEL randomized clinical trial. *JAMA*. 2017 Dec 5; 318(21):2089-98.
175. McDermott MM, Carroll T, Carr J, Yuan C, Ferrucci L, Guralnik JM, Kibbe M, Criqui MH, **Tian L**, Polonsky T, Zhao L. Femoral artery plaque characteristics, lower extremity collaterals, and mobility loss in peripheral artery disease. *Vascular Medicine*. 2017 Dec; 22(6):473-81.
176. Liu S, **Tian L.**, Lee S and Xie MG. Exact inference on Meta analysis with generalized fixed effects and random-effects models. *Biostatistics & Epidemiology* 2018; 1(2):1-22.

177. Wang Y and **Tian L**. An efficient numerical algorithm for exact inference in Meta analysis. *Journal of Statistical Computation and Simulation* 2018; 88:646-656.
178. Michael H, **Tian L**. and Ghebremichael M. The ROC curve for regularly measured longitudinal biomarkers. *Biostatistics* 2018; doi: 10.1093/biostatistics/kxy010.
179. Zhao L, **Tian L**, Claggett B, Pfeffer M, Kim DH, Solomon S and Wei LJ. Estimating treatment effect with clinically interpretation from a comparative clinical trial with an endpoint subject to competing risks, *JAMA Cardiol.* 2018; doi:10.1001/jamacardio.2018.0127.
180. Zhang Z, Ying L and **Tian L**. On feature ensemble optimizing the sensitivity and partial ROC curve. *Statistica Sinica* 2018 (in press).
181. Huang B, **Tian L**, Talukder E, Rothenberg M, Kim DH, and Wei LJ. Evaluating treatment effect based on duration of response for a comparative oncology study. *JAMA Oncology* 2018 (in press).
182. Horiguchi M., **Tian L**, Uno H., Cheng S, Kim DH, Schrag D and Wei LJ. Quantifying the long-term survival treatment effect in a comparative oncology clinical study. *JAMA Oncology* 2018 (in press).
183. Uno H, Claggett B, **Tian L**, Fu H, Huang B, Kim DH, and Wei LJ. Adding a New Analytical Procedure with Clinical Interpretation in the Tool Box of Survival Analysis. *Ann Oncol.* 2018 Apr 3. doi: 10.1093/annoc/mdy109.
184. Zhang H, Watanabe R, Berry GJ, **Tian L**, Goronzy JJ, Weyand CM. Inhibition of JAK-STAT Signaling Suppresses Pathogenic Immune Responses in Medium and Large Vessel Vasculitis. *Circulation.* 2018 May 1;137(18): 1934-1948
185. Abou-Elkacem L, Wang H, Chowdhury SM, Kimura RH, Bachawal SV, Gambhir SS, **Tian L**, Willmann JK. Thy1-Targeted Microbubbles for Ultrasound Molecular Imaging of Pancreatic Ductal Adenocarcinoma, *Clin Cancer Res.* 2018 Apr 1; 24(7):1574-1585.
186. Padda SK, Terrone D, Tian L, Khuong A, Neal JW, Riess JW, Berry MF, Hoang CD, Burt BM, Leung AN, Schwartz EJ, Shrager JB, Wakelee HA. Computed Tomography Features associated with the eighth edition TNM stage classification for thymic epithelial tumors, *J Thorac Imaging.* 2018 May; 33(3):176-183.
187. McDermott MM, Peterson CA, Sufit R, Ferrucci L, Guralnik JM, Kibbe MR, Polonsky TS, **Tian L**, Criqui MH, Zhao L, Stein JH, Li L, Leeuwenburgh C. Peripheral artery disease, calf skeletal muscle mitochondrial DNA copy number, and functional performance. *Vasc Med.* 2018 May 1:13548863X18765667.
188. McDermott MM, Spring B, Berger JS, Treat-Jacobson D, Conte MS, Creager MA, Criqui MH, Ferrucci L, Gornik HL, Guralnik JM, Hahn EA, Henke P, Kibbe MR, Kohlman-Trighoff D, Li L, Lloyd-Jones D, McCarthy W, Polonsky TS, Skelly C, **Tian L**, Zhao L, Zhang D, Rejeski WJ. Effect of a Home-Based Exercise Intervention of Wearable Technology and Telephone Coaching on Walking Performance in Peripheral Artery Disease: The HONOR Randomized Clinical Trial. *JAMA* 2018 Apr 24; 319(16):1665-1676.

189. Ali A, Ferrucci L, Guralnik J, Criqui MH, Polonsky T, Zhao L, Kibbe M, **Tian L**, McDermott MM. Changes in calf skeletal muscle characteristics and decline in walking performance in peripheral artery disease. *IVASCULAR MEDICINE* 2018 Jun 1 (Vol. 23, No. 3, pp. 311-311).
190. Polonsky TS, **Tian L**, Criqui M, Ferrucci L, Guralnick J, Kibbe M, Sufit R, McDermott MM. Associations of weight change with calf muscle characteristics and functional decline in adults with peripheral artery disease. *VASCULAR MEDICINE* 2018 Jun 1 (Vol. 23, No. 3, pp. 317-318).
191. Patel KH, Kibbe M, Guralnik J, Leeuwenburgh C, Sufit R, **Tian L**, Ferrucci L, Polonsky T, Criqui MH, McDermott MM. Durability of supervised treadmill exercise benefits in people with peripheral artery disease. *VASCULAR MEDICINE* 2018 Jun 1 (Vol. 23, No. 3, pp. 301-302).
192. McDermott MM, Kibbe M, Criqui M, Ferrucci L, **Tian L**, Lloyd-Jones D, Zhao L, Domanchuk K, Polonsky T. Racial differences in granulocyte macrophage colony-stimulating factor (GM-CSF) effects on walking performance in peripheral artery disease: The PROPEL randomized clinical trial. *VASCULAR MEDICINE* 2018 Jun 1 (Vol. 23, No. 3, pp. 309-310).
193. Chowdhury SM, Lee T, Bachawal SV, Devulapally R, Abou-Elkacem L, Yeung TA, Wischhusen J, **Tian L**, Dahl J, Paulmurugan R, Willmann JK. Longitudinal assessment of ultrasound-guided complementary microRNA therapy of hepatocellular carcinoma. *Journal of Controlled Release*. 2018 Jul 10;281:19-28.
194. Wang H, Hyvelin JM, Felt SA, Guracar I, Vilches-Moure JG, Cherkaoui S, Bettinger T, **Tian L**, Lutz AM, Willmann JK. US molecular imaging of acute ileitis: anti-inflammatory treatment response monitored with targeted microbubbles in a preclinical model. *Radiology*. 2018 Jul 24:172600.
195. Uno H, **Tian L**, Wei LJ. Estimating and Interpreting the Overall Survival Benefit of Checkpoint Inhibitors via Meta-analysis. *JAMA oncology*. 2018 Jun 21.
196. Claggett B, **Tian L**, Wei LJ. Meta-analysis to Evaluate High-Dose Therapy Followed by Stem Cell Transplant in Patients With Multiple Myeloma. *JAMA oncology*. 2018 Aug 9.
197. Claggett B, **Tian L**, McCaw ZR, Takeuchi M, Wei LJ. Sex as a predictor of response to cancer immunotherapy. *The Lancet Oncology*. 2018 Aug 1;19(8):e377.
198. Claggett, B., **Tian L.**, Fu, H., Solomon, S., and Wei, LJ. (2017) Quantifying the totality of treatment effect with multiple event-time observations in the presence of a terminal event from a comparative clinical study. *Biostatistics* (in press), 2018.
199. **Tian L.**, Liu, Y., Fire, A., Boyd, S. and Olshen, R. (2017) Clonality: Point estimation. *The Annals of Applied Statistics* (in press), 2018.
200. Parast, L., Cai, T. and **Tian L.** (2019) Using a surrogate marker for early testing of a treatment effect, *Biometrics* (in press), 2019.
201. Fei, J., **Tian L.** and Wei LJ. (2019) Robust Alternatives to ANCOVA for estimating the treatment effect via a randomized comparative study. *JASA* (in press), 2019.

202. Michael, H., Thornton, S., Xie, M., and **Tian L.** (2018) Exact inference on the random effects model for Meta analysis with few studies. *Biometrics* (in press), 2019.
203. **Tian L.**, Jiang F, Hasegawa T., Uno, H., Pfefer M, and Wei LJ (2018) Moving beyond the conventional stratified analysis to estimate the overall treatment effect with the data from a comparative randomized clinical study *Statistics in Medicine* (in press), 2019.
204. Parast, L., **Tian L.** and Cai, T. Assessing the value of a surrogate outcome. *Lifetime Data Analysis* (in press), 2019.
205. McDermott MM, Guralnik JM, **Tian L.**, Zhao L, Polonsky TS, Kibbe MR, Criqui MH, Zhang D, Conte MS, Domanchuk K, Li L, Sufit R, Leeuwenburgh C, Ferrucci L. Comparing 6-minute walk versus treadmill walking distance as outcomes in randomized trials of peripheral artery disease. *J Vasc Surg.* 2019 Dec 21;. doi: 10.1016/j.jvs.2019.05.058.
206. Darnall BD, Mackey SC, Lorig K, Kao MC, Mardian A, Stieg R, Porter J, DeBruyne K, Murphy J, Perez L, Okvat H, **Tian L.**, Flood P, McGovern M, Colloca L, King H, Van Dorsten B, Pun T, Cheung M. Comparative Effectiveness of Cognitive Behavioral Therapy for Chronic Pain and Chronic Pain Self-Management within the Context of Voluntary Patient-Centered Prescription Opioid Tapering: The EMPOWER Study Protocol. *Pain Med.* 2019 Dec 26;. doi: 10.1093/pm/pnz285.
207. Cholerton B, Poston KL, **Tian L.**, Quinn JF, Chung KA, Hiller AL, Hu SC, Specketer K, Montine TJ, Edwards KL, Zabetian CP. Participant and Study Partner Reported Impact of Cognition on Functional Activities in Parkinson's Disease. *Mov Disord Clin Pract.* 2020 Jan;7(1):61-69. doi: 10.1002/mdc3.12870.
208. Tanno H, Gould TM, McDaniel JR, Cao W, Tanno Y, Durrett RE, Park D, Cate SJ, Hildebrand WH, Dekker CL, **Tian L.**, Weyand CM, Georgiou G, Goronzy JJ. Determinants governing T cell receptor α/β -chain pairing in repertoire formation of identical twins. *Proc Natl Acad Sci U S A.* 2020 Jan 7;117(1):532-540.
209. Jiang W, Birtley JR, Hung SC, Wang W, Chiou SH, Macaubas C, Kornum B, **Tian L.**, Huang H, Adler L, Weaver G, Lu L, Ilstad-Minnihan A, Somasundaram S, Ayyangar S, Davis MM, Stern LJ, Mellins ED. Author Correction: In vivo clonal expansion and phenotypes of hypocretin-specific CD4+ T cells in narcolepsy patients and controls. *Nat Commun.* 2020 Jan 8;11(1):242.
210. Robinson TE, Goris ML, Moss RB, **Tian L.**, Kan P, Yilma M, McCoy KS, Newman B, de Jong PA, Long FR, Brody AS, Behrje R, Yates DP, Cornfield DN. Mucus plugging, air trapping, and bronchiectasis are important outcome measures in assessing progressive childhood cystic fibrosis lung disease. *Pediatr Pulmonol.* 2020 Jan 21;. doi: 10.1002/ppul.24646.
211. Gronsbell J, Hong C, Nie L, Lu Y, **Tian L.** Exact inference for the random-effect model for meta-analyses with rare events. *Stat Med.* 2020 Feb 10;39(3):252-264.
212. **Tian, L.**, Jin, H., Uno, H., Lu, Y., Huang, B., Anderson, K. M., & Wei, L. J. (2020). On the empirical choice of the time window for restricted mean survival time. *Biometrics*.
213. Tanno H, Gould TM, McDaniel JR, Cao W, Tanno Y, Durrett RE, Park D, Cate SJ, Hildebrand WH, Dekker CL, **Tian L.** Determinants governing T cell receptor α/β -chain pairing in

repertoire formation of identical twins. Proceedings of the National Academy of Sciences. 2020 Jan 7;117(1):532-40.

C.2 Review and Commentary

1. **Tian L** and Wei LJ, Discussion on "Maximum likelihood estimation in semiparametric regression models with censored data", *JRSS(B)*, 2007, 69:557.
2. **Tian L**. Discussion on "Combining Biomarkers to Optimize Patient Treatment Recommendations", *Biometrics*, 2014.
3. Michael H, **Tian L**. Discussion of "a risk-based measure of time-varying prognostic discrimination for survival models," by C. Jason Liang and Patrick J. Heagerty. *Biometrics* 2016; 73:735-738.
4. Cai T., **Tian L**. Comments on "Personalized dose finding using outcome weighted learning" by Chen, Zheng and Kosorok, *J Am Stat Assoc.* 2016; 111(516): 1521-1524.

C.3 Book Chapter and Conference Proceedings

1. Yong H, Cai T, Wei LJ, **Tian L**. Classical Model Selection Florence, "Handbook of Survival Analysis" Edited by Klein, Houwelingen, Ibrahim and Scheike 2013 Chapman and Hall/CRC
2. **Tian L**, Zhao X. Statistical Methods for Personalized Medicine, "Advanced Medical Statistics" (2nd edition) Edited by Ying, Fang, Tian and Jin, 2016, World Scientific.
3. Zhou X, Fang J, Yu C, Xu Z, **Tian L**, Ying L. Meta Analysis, "Advanced Medical Statistics" (2nd edition) Edited by Ying, Fang, Tian and Jin, 2016, World Scientific
4. Song, Y., Ying, L., and **Tian L**. Accuracy of Meta analysis using different levels of diagnostic accuracy measures. "Statistical Applications from Clinical Trials and Personalized Medicine to Finance and Business Analytics" Edited by Lin, Wang Hu, Chen and Liu, 2016, Springer.
5. Wang, Y., and **Tian L**. (2017). The equivalence between Mann-Whitney Wilcoxon test and score test based on the proportional odds model for ordinal responses. 2017 "4th International Conference on Industrial Economics System and Industrial Security Engineering (IEIS)", 1-5.

D. Invited Presentations

D.1 Invited Presentations at International Conferences

1. Quantile Regression under General Random Censorship, ENAR International Biometrics Society Meeting 2002, Arlington, VA
2. Making Inference by Perturbing a Non-Smooth Estimating Function, ENAR International Biometric Society Meeting 2004, Pittsburgh, PA

3. On the Accelerated Failure Time Model for Current Status and Interval Censored Data, Joint Statistical Meeting, 2005, Minneapolis, MN
4. Predicting Future Responses Based on Possibly Mis-Specified Working Model, Joint Statistical Meeting 2007, Salt Lake City, UT
5. Implementation of Estimating-function based inference procedures with MCMC samplers, (Journal of American Statistical Association: Theory and Methods Invited Session) Joint Statistical Meeting 2007, Salt Lake City, UT
6. On Combining Multiple Estimating Equations, ENAR International Biometric Society Meeting 2008, Arlington, VA
7. Lasso Regularized Estimation for the Accelerated Failure Time Model, IMSC-International Conference on Statistics and Probability, 2008, Hangzhou, P.R. China
8. Predicting t-year Residual Life with Longitudinal Markers, IMSC International Conference on Statistics and Probability 2009, Weihai, P.R. China
9. Exact and Efficient Inference Procedure for Meta-analysis and Its Application to the Analysis of Independent 2 by 2 Tables with All Available Data but Without Artificial Continuity Correction, Joint Statistical Meeting 2010, Vancouver, Canada
10. Cell Type Specific Microarray Gene Expression Analysis, IMSC-International Conference on Statistics and Probability, 2010, Kunming, P.R. China
11. On Combining Multiple Estimating Functions, The First Joint Biostatistics Symposium, 2010, Beijing, P.R. China
12. Modified Covariate Approach for Personalized Medicine, Joint Statistical Meeting 2011, Miami, FL
13. Modified Outcome Approach for Personalized Medicine, DIA Workshop on Tailored Therapy, 2011, Washington DC.
14. Evaluating the Performance of Personalized Treatment Stratification, IMSC-International Conference on Statistics and Probability, 2011, Xi'an, P.R. China
15. Modified Covariate Approach for Detecting Treatment Covariates Interactions, ICSA Applied Statistics Symposium, 2011, New York, NY
16. Modified Covariate Approach for Detecting Treatment Covariates Interactions, Workshop on Personalized Medicine, 2012, Boston, MA
17. On Detection of Interaction between High Dimensional Covariates and Treatment, International Workshop on the Perspectives on High-dimensional Data Analysis II, 2012, Montreal, Canada
18. Interactions between High Dimensional Covariates and Treatment, American Statistical Association Bay Area Chapter Seminar Series, 2012, Palo Alto, CA
19. How to Select Target Population for Future Efficacy Study, ICSA Applied Statistics Symposium, 2012, Boston, MA

20. Identifying Subgroup of Patients Having the Best Treatment Effect, the 2nd Institute of Mathematics Asia Pacific Rim Meeting, Tuskuba, 2012, Japan.
21. Detecting Treatment and Covariate Interaction in Randomized Clinical Trials, Joint Statistical Meeting 2012, San Diego, CA
22. Exact inference for random effect model in meta analysis, Joint Statistical Meeting 2013, Quebec, Canada
23. A general framework of stratifying patient population according to the treatment effect, The 9th ICSA international conference, 2013, Hong Kong.
24. Exact Meta analysis: An Improvement of Laird-DerSimonian Estimator, the 3rd International Biostatistics Symposium, 2014, Chengdu. P.R. China
25. Restricted mean survival time in survival analysis. The 3rd Institute of Mathematics Asia Pacific Rim Meeting, Taipei, 2014. Taiwan.
26. A general framework for personalized medicine. Joint Statistical Meeting 2015. Seattle.
27. Discussion on restricted mean survival time. Joint Statistical Meeting 2016. Chicago.
28. Bias adjustment in subgroup analysis. The ICSA international conference, 2016, Shanghai.
29. Innovative methods for the identification of predictive biomarker signatures in oncology, 2017, IMS Singapore.
30. Exact Inference on Meta analysis with random effect model, 2017, Joint Statistical Meeting 2017, Baltimore.
31. Exact inference on restricted mean survival time, 2017, Data science, precision medicine and risk analysis with lifetime data, 2017 Connecticut.
32. Exact inference in survival analysis with rare event, 2017, 10th International Conference on Computational and Methodological Statistics, 2017, London.
33. A general procedure for precision medicine in oncology, 2018, ICSA, Qingdao, P.R. China.

D.2 Invited Presentations at Universities

Give Invited Talks at Harvard University, North Carolina State University at Raleigh, Northwestern University, University of Illinois at Chicago, University of Illinois at Urbana-Champaign, Pittsburgh University, University of California at River-Side, Columbia University, Stanford University, University of California at San-Francisco, University of Wisconsin at Madison. University of California at San Diego, University of California at Los Angeles, University of California at Berkeley, Dartmouth College, Rutgers University, University of North Carolina at Chapel Hill

D.3. Short Courses/Distinguished Lectures

1. Hot Topics in Clinical Trials-Continuing Education-Courses, Joint Statistical Meeting 2008, Denver, CO
2. Meta Analysis, American Course on Drug Development and Regulatory Sciences, 2010, San-Francisco, CA
3. Statistical Methods for Personalized Medicine, The 2nd Institute of Mathematical Statistics Asia Pacific Rim Meeting, 2012, Tokyo, Japan
4. Varying Coefficients Model in Survival Analysis, CARDIA Statistical Methodology Workshop, 2013, Chicago.
5. Personalized Medicine, Society for Clinical Trial 34th Annual Meeting, 2013, Boston
6. Survival Analysis, the 3rd International Biostatistics Symposium, 2014, Chengdu. P.R. China.
7. Survival for Precision Medicine, ENAR 2018, Atlanta, USA.

E. Professional Services

Professional Association

Board director of International Chinese Statistical Association (since 2015)

Board member of Dahshu (since 2015)

Chair for the Continuing Education and Short Courses Committee, American Statistical Association Bay Area Chapter (since 2012)

Grant Review and Study Section

Member in the NIH study sections for grant application review (2013, 2018)

Grant Reviewer for the Research Grants Council of Hong Kong (2008)

Conference Organization.

Short Course Committee Chair, International Chinese Statistical Association (ICSA), Applied Statistical Symposium, 2012

Program Committee Member, Joint Statistical Meeting, 2013

Program Committee Chair, 14th Asia Pacific Bioinformatics Conference, 2016

Organizing Committee Member, Forum on Regulatory Science and Biomedical Innovations, 2017 and 2018.

General Chair, Dahshu Scientific Symposium, 2018

Program Committee Member, 16th Asia Pacific Bioinformatics Conference, 2018

Reviewers

Biometrika, Biometrics, Journal of American Statistical Association, Annals of Statistics, Annals of Applied Statistics, Biostatistics, Statistics in Medicine and Bioinformatics.

F. Editorial Service

Associate Editor for “Statistics in Medicine”

Associate Editor for “Biometrics”

Associate Editor for “Chance”.

Associate Editor for “Statistical Theory and Related Fields”

Associate Editor for “Biostatistics & Epidemiology”

Book Editor for “Advanced Medical Statistics (2nd edition)”.

Guest Editor for Special Issue of Stats on “Survival Models and Applications”.

G. Funding

Have been investigator for 40 NIH funded studies (2004-2018):

Active:

1. NIH/R01 (**Principal Investigator**): Statistical Methods for Optimizing Personalized Treatment Selection.
2. NIH/P50(Data Core Director): Stanford Alzheimer’s Disease Research Center (PI: Dr. Henderson, Stanford University)
3. NIH/R01(Statistician): Low Intensity Exercise Intervention for Peripheral Artery Disease: The Lite Trial (PI: Dr. McDermott, Northwestern University)
4. NIH/R01(Statistician): TELmisartan plus Exercise to improve functioning in PAD: The TELEX Trial (PI: Dr. McDermott, Northwestern University)
5. NIH/R01(Statistician): Improve PAD Performance with METformin: The PERMET Trail (PI: Dr. McDermott, Northwestern University)
6. NIH/R01(Statistician): Defining the clinical utility of the Lung Clearance Index (PI: Dr. Carlos Milla, Stanford University)
7. NIH/R01(Statistician): Severe Maternal Morbidity: An Investigation of Maternal Weight, Social Disadvantage, & Racial-Ethnic Disparities (PI: Dr. Carmichael, Stanford University)
8. NIH/UL1(Statistician): Stanford Center for Clinical and Translational Education and Research (SCCTER) UL1 (PI: Dr. Cullen, Stanford University)

9. NIH/R01(Co-investigator): Robust Statistical Methods to Identify and Use Surrogate Markers in Diabetes (PI: Dr. Parast, Rand Corp)
10. NIH/R01 (Statistician): Influence of age on CD4 T memory cells (PI: Dr. Goronzy, Stanford University).
11. NIH/U01 (Statistician): Pacific Udall Center (PI: Dr. Montine, Stanford University).
12. AHA (Statistician): AHA Vascular Disease SFRN (PI: Dr. McDermott, Northwestern University)

Past:

13. NIH/R01 (Statistician): CD8 T cell in Rheumatoid Arthritis (PI: Cornelia Weyand, Stanford University).
14. NIH/R01 (Statistician): Blood Markers of Vulnerability in High Risk Vascular Patients (PI: Mary McDermott, Northwestern University).
15. NIH/R01(Statistician): Leukocyte Signaling in the Elderly and Vaccine Immunogenicity (PI: David Lewis, Stanford University)
16. NIH/R01 (Statistician): Longitudinal Studies of Coronary Heart Disease Risk Factors in Young Adults (PI: Kiang Liu, Northwestern University)
17. W81XWH (Statistician): Improving the Diagnostics Specificity of CT for Early Detection of Lung Cancer: 4D CT Based Pulmonary Nodule Elastometry (PI: Billy Loo, Stanford University).
18. NIH/U01 (Statistician): Insights into Immune-Related Disease Born from Population Genomics, (PI: Peter Parham, Stanford University).
19. NIH/U01 (Statistician): Elafin Therapy for Lung Disease (PI: Marlene Rabinovitch, Stanford University).
20. NIH/R01 (Statistician): Multi-Ethnic Study of Atherosclerosis (PI: Kiang Liu, Northwestern University).
21. NIH/U19 (Statistician): Vaccination and Infection: Indicators of Immunological Health and Responsiveness (PI: Mark Davis, Stanford University).
22. NIH/R01 (Co-investigator): Statistical Methods for HIV/AIDS Studies (PI: Lee-Jee Wei, Harvard University).
23. NIH/R21 (Co-investigator): Robust Statistical Methods to Identify Surrogate Markers in Diabetes (PI: Layla Parast, Rand Corp).
24. NIH/R01 (Statistician): Inflammation and Peripheral Arterial Diseases Outcomes, 2005-2010 (PI: Mary McDermott, Northwestern University).
25. NIH/R01 (Statistician): Inflammation/Thrombosis Genomics and Atherosclerosis in Young Adults, 2006-2008 (PI: David Siscovick, University of Washington).

26. NIH/R01 (Statistician): Hispanic Community Health Study, 2006-2008 (PI: Martha Daviglius, University of Illinois at Chicago).
27. NIH/R21 (Statistician): Heart Failure Evaluation in Post-Menopausal Women: The Women's Health Initiative, 2007-2008 (PI: Liviu Klein, Northwestern University).
28. NIH/R21 (Statistician): Towards Maximizing the Scientific Value of the Biological Specimens from the Women's Health Initiative, 2007-2008 (PI: Alice Lichtenstein, Tufts University)
29. NIH/R01 (Statistician): Procoagulants in Aging CARDIA Participants (PI: David Green, Northwestern University)
30. NIH/R01 (Statistician): Epidemiology and Mechanisms of ECG Abnormalities: Young Adult to Middle Age, 2007-2008 (PI: Don Lloyd-Jones, Northwestern University).
31. NIH/R01 (Statistician): Low CV Risk, Ages 25-44 & CV/non-CV Outcomes, 65+, 2007-2008 (PI: Martha Daviglius, University of Illinois at Chicago).
32. NIH/U01 (Statistician): Nocturnal Hypertension and Prevention of Microalbuminuria in Type I Diabetes, 2007-2008 (PI: Daniel Batlle, Northwestern University).
33. NIH/R01 (Statistician): Magnetic Resonance in Peripheral Arterial Disease, 2008-2010 (PI: Mary McDermott, Northwestern University).
34. NIH/R01 (Statistician): Chicago Healthy Aging Low Risk MRI Angiography Study, 2009-2009 (PI: Martha Daviglius, University of Illinois at Chicago).
35. NIH/R01 (Statistician): Vitamin D levels and Peripheral Arterial Disease Outcome, 2010-2011 (PI: Mary McDermott, Northwestern University).
36. NIH/R01 (Statistician): Vitamin D Standardization Program, 2011-2012 (PI: Chris Sempos, NIH).
37. NIH/R01 (Consultant): Femoral Plaque Composition, Oxidative Stress and Coronary Event, 2011-2012 (PI: Mary McDermott, Northwestern University).
38. NIH/R01 (Consultant): Progenitor Cell Release Plus Exercise to Improve Functional Performance in PAD, 2011-2012 (PI: Mary McDermott, Northwestern University).
39. Cystic Fibrosis Foundation/SCHRIJ11A0 (Statistician): Characterization of CFTR Mutations among Nonwhite CF Patients, 2011-2014 (PI: Iris Schrijver, Stanford University).
40. NIH/R21 (Statistician): Long-term Predictors of Morbidity in Older Age, 2005-2007 (PI: Lijing Yan, Northwestern University).