CURRICULUM VITAE

Rodney Sparapani PhD

Associate Professor Department of Institute for Health and Equity Division of Biostatistics

OFFICE ADDRESS:

Medical Education Building 8701 Watertown Plank Rd Milwaukee, WI 53226

EDUCATION:

05/27/1989 B.S. in Mathematics, Michigan Technological University, Houghton, MI 05/19/1991 M.S. in Mathematics, Marquette University, Milwaukee, WI 09/16/2011 Ph.D. in Biostatistics, Medical College of Wisconsin, Milwaukee, WI

FACULTY APPOINTMENTS:

- 12/16/2013 06/30/2020 Assistant Professor of Biostatistics, Institute for Health and Equity, Division of Biostatistics, Medical College of Wisconsin, Milwaukee, WI
- 12/16/2013 Present Member, Center for Advancing Population Science, Medical College of Wisconsin, Milwaukee, WI
- 04/01/2014 Present Biostatistician, Research-Primary Care, Clement J Zablocki VA Medical Center, Milwaukee, WI
- 08/01/2014 Present Adjunct Assistant Professor, Department of Mathematical Sciences, University of Wisconsin-Milwaukee, Milwaukee, WI
- 01/02/2015 Present Research Member, Cancer Center, Hematologic Malignancy & Transplantation Research Program, Medical College of Wisconsin
- 01/28/2015 Present Primary Member, Cardiovascular Center, Medical College of Wisconsin
- 07/01/2020 Present Associate Professor of Biostatistics, Institute for Health and Equity, Division of Biostatistics, Medical College of Wisconsin, Milwaukee, WI

AWARDS AND HONORS:

2003 Chapter Service Recognition Award, Wisconsin Chapter, American Statistical Association (ASA) 2006 Chapter Service Recognition Award, Wisconsin Chapter, American Statistical Association (ASA)

- 06/13/2016 06/17/2016 New Researcher Travel Award, International Society for Bayesian Analysis (ISBA) World Meeting, Sardinia, Italy
- 07/28/2016 07/30/2016 New Researcher Travel Award, Institute of Mathematical Statistics (IMS) New Researchers Conference in Statistics and Probability, Madison, WI
- 2016 Outstanding Faculty Service Award, Faculty IT Committee, Faculty Council, Medical College of Wisconsin
- 2017 Outstanding Faculty Service Award, Faculty IT Committee, Faculty Council, Medical College of Wisconsin

MEMBERSHIPS IN HONORARY AND PROFESSIONAL SOCIETIES:

1998 - 1999 North Carolina Chapter of the ASA (Webmaster)

- 05/01/1999 Present American Statistical Association (ASA) (Member)
- 01/01/2002 06/30/2012 Wisconsin Chapter of the ASA (Secretary/Treasurer)

07/01/2012 - 06/30/2013 Wisconsin Chapter of the ASA (Vice President)

07/01/2013 - 06/30/2014 Wisconsin Chapter of the ASA (President)

07/01/2013 - 06/30/2014 Wisconsin Chapter of the ASA (Council of Chapters Representative)

07/01/2014 - 06/30/2015 Wisconsin Chapter of the ASA (Past President)

07/01/2015 - 06/30/2018 Wisconsin Chapter of the ASA (Director)

07/01/2016 - 06/30/2017 Wisconsin Chapter of the ASA (Council of Chapters Representative)

- 07/01/2018 Present Wisconsin Chapter of the ASA (Council of Chapters Representative)
- 01/01/2020 12/31/2020 International Society for Bayesian Analysis (Chair-elect of the Section on Biostatistical and Pharmaceutical Statistics)
- 01/01/2021 12/31/2021 International Society for Bayesian Analysis (Chair of the Section on Biostatistical and Pharmaceutical Statistics)

NATIONAL ELECTED/APPOINTED LEADERSHIP AND COMMITTEE POSITIONS:

02/2019 Health Care Research Training Study Section, Agency for Healthcare Research and Quality 03/2019 Chairman, Hospital Readmissions Reduction Program Review Panel, Centers for Medicare and Medicaid Services

RESEARCH GRANTS/AWARDS/CONTRACTS/PROJECTS:

Title:	Research in early child development to
	improve resiliency and equity
Source:	AHW-Research and Education Program
Role:	Co-investigator
PI:	John Meurer
Dates:	10/01/2017 - 10/01/2022

Title:	Machine Learning Strategies for Optimal
	Donor Selection
Source:	National Marrow Donor Program
Role:	Co-investigator
PI:	Brent Logan
Dates:	10/01/2018 - 09/30/2019

Prior

Peer Review	
Title:	SES Disparities in Breast Cancer: Effect
	of Pharmaceutical Coverage
Source:	NIH/NCI
Role:	Biostatistician
PI:	Ann Nattinger
Dates:	03/01/2009 - 02/28/2014
Title:	Bayesian Nonparametric Methodology for CER: Instrumental Variables Models
Source:	NIH/NCI
Role:	Consultant
PI:	Purushottam Laud
Dates:	10/01/2010 - 09/30/2013
Title:	Population Health Improvement for Patients and Employees with Diabetes
Source:	Advancing a Healthier Wisconsin
Role:	Co-investigator
PI:	John Meurer
Dates:	12/16/2013 - 03/31/2018

Title: Source: Role: PI: Dates:	Move Out: A Partnership with Veterans Groups to Enhance Weight Management in VHA Dept. of Veterans Affairs Co-investigator Jeff Whittle 05/01/2014 - 08/31/2015
Title:	Cardiovascular Roadmap: Bridging our Foundations to Signature Programs
Source:	Advancing a Healthier Wisconsin
Role:	Co-investigator
PI:	Ivor Benjamin
Dates:	06/01/2014 - 05/31/2018
Title:	Left ventricular hypertrophy surveillance with ECGs, predictive modeling and personalized medicine
Source:	Advancing a Healthier Wisconsin
Role:	Principal Investigator
Dates:	07/01/2015 - 06/30/2016
Title:	Ensemble Prediction Models for Personalized Therapy and Survival
Source:	Analysis using Large Databases Advancing a Healthier Wisconsin (President's Challenge)
Role:	Co-investigator
PI:	Brent Logan
Dates:	07/01/2015 - 06/30/2017
Title:	Mitochondrial function disparities contributing to cardiovascular toxicity
	from radiation therapy
Source:	Advancing a Healthier Wisconsin
Role:	Co-investigator
PI:	Meetha Medhora
Dates:	07/01/2017 - 06/30/2019
Title:	Bayesian ensemble models for time to event data and individualized treatments
Source:	Froedtert Hospital Foundation
Role:	Co-investigator
PI:	Brent Logan
Dates:	06/01/2018 - 05/31/2019

INVITED LECTURES/WORKSHOPS/PRESENTATIONS:

Regional

Prakash Laud, Rodney Sparapani, Introductory workshop on Bayesian modeling and inference, Milwaukee, WI, 10/26/2007

<u>National</u>

Rodney Sparapani, Brent Logan, Robert McCulloch, Prakash Laud, Nonparametric survival analysis using Bayesian Additive Regression Trees (BART), IMS New Researchers Conference in Statistics and Probability, Madison, WI, 07/28/2016 - 07/30/2016

Rodney Sparapani, Lisa Rein, Sergey Tarima, Tourette Jackson and John Meurer, Nonparametric recurrent

events analysis with BART and an application to hospital admissions for patients with diabetes, Kliakhandler Conference, Houghton, MI, 08/16/2017 - 08/20/2017

Rodney Sparapani, Robert McCulloch, Brent Logan, Prakash Laud, Bayesian Additive Regression Trees (BART) Bootcamp, Biostatistics in the Modern Computing Era, Milwaukee, WI, 09/28/2017 -09/30/2017

International

- Rodney Sparapani, Emacs Speaks Statistics: a multi-platform, multi-package, intelligent environment for statistical analysis, JSM, New York, NY, 08/11/2002 08/15/2002
- Rodney Sparapani, Rob McCulloch, Prakash Laud, Semiparametric instrumental variables estimation using Bayesian Additive Regression Trees (BART), WNAR, Honolulu, 06/15/2014 - 06/18/2014
- Rodney Sparapani, Brent Logan, Robert McCulloch, Prakash Laud, Nonparametric survival analysis using Bayesian Additive Regression Trees (BART), ISBA World Meeting, Sardinia, Italy, 06/13/2016 -06/17/2016
- Rodney Sparapani, Lisa Rein, Sergey Tarima, Tourette Jackson and John Meurer, Nonparametric recurrent events analysis with BART and an application to the hospital admissions of patients with diabetes, Lifetime Data Science Conference, Storrs, CT, 05/25/2017 - 05/27/2017

PEER REVIEWED WORKSHOPS/PRESENTATIONS:

<u>International</u>

- Rodney Sparapani, Prakash Laud, Jessica Pruszynski, Rob McCulloch, A Bayesian approach to the instrumental variable approach with a binary outcome and a binary treatment, JSM, San Diego, 07/29/2012 08/02/2012
- Rodney Sparapani, Prakash Laud, Jessica Pruszynski, Rob McCulloch, Bayesian inference for causal quantities via the instrumental variable approach with a binary outcome and a binary treatment, JSM, Montreal, 08/04/2013 08/08/2013
- Rodney Sparapani, Brent Logan, Robert McCulloch, Prakash Laud, Nonparametric survival analysis using Bayesian Additive Regression Trees (BART), JSM, Chicago, 07/30/2016 - 08/04/2016
- Rodney Sparapani, Matt Pratola, Brent Logan, Prakash Laud, Robert McCulloch, Nonparametric Survival Analysis with Dirichlet Processes Mixtures and Heteroskedastic Bayesian Additive Regression Trees, JSM, Denver, CO, 07/27/2019 - 08/01/2019

COMMITTEE SERVICE:

Medical College of Wisconsin

06/01/2014 - 05/31/2015 Member, Computing Committee, Division of Biostatistics

- 07/01/2014 06/30/2016 Member, Faculty Information Technology Committee, Faculty Council
- 09/12/2014 Present Member, Governing Board of the AHW Cardiovascular Roadmap, Cardiovascular Center
- 01/01/2015 Present Member, Research Computing Center Faculty Advisory Committee
- 06/01/2015 Present Chairman, Computing Committee, Division of Biostatistics
- 09/01/2015 Present Member, Engagement Committee, Institute for Health and Society
- 07/01/2016 06/30/2019 Member, Graduate Studies Council Course Evaluation Committee
- 07/01/2016 06/30/2017 Vice-chair, Faculty Information Technology Committee, Faculty Council
- 07/01/2016 10/31/2017 Co-chair, Organizing Committee, Biostatistics in the Modern Computing Era

MEDICAL COLLEGE TEACHING ACTIVITIES:

Graduate Student Education

- 2013 2014 Advanced Bayesian Statistics
- 2014 2015 Statistical Models and Methods II
- 2015 2016 Statistical Models and Methods III
- 2015 2016 Biostatistics I
- 2016 2018 Biostatistical Computing
- 2018 2019 Statistical Models and Methods I
- 2019 2020 Advanced Bayesian Analysis

EXTRAMURAL STUDENTS, FACULTY, RESIDENTS, AND CLINICAL/RESEARCH FELLOWS MENTORED:

Medical Students

Antonio Roki, 07/2018 - Present, Value of CHEK2 genetic testing in pancreatic cancer

Graduate Students

MS Committees

Stephanie Ghojallu, RN, 01/01/2015 - 05/01/2016 Determining the Incidence and Risk Factors of Cardiotoxicity in Breast Cancer Patients in Community Care

Mary Jurken, PhD, 03/01/2015 - 04/01/2016 A Novel Assay for the Detection of Humoral Immune Deficiencies

Geetanjali Dang, MD, 06/01/2015 - 12/30/2016 Incremental Value of estimated Glomerular filtration rate in Improving Stroke Risk Stratification in Patients with and without Atrial Fibrillation considered to be low-intermediate risk by CHA2DS2VASc Score

PhD Committees

Yushu Shi, 11/01/2015 - 06/30/2017 Weibull Mixture Models for Regression in the Context of Time-toevent Data

Bonifride Tuyishimire, 10/31/2016 - 10/01/2018 Modeling Individualized Treatment Rules Using Bayesian Additive Regression Trees

Tucker Keuter, 08/01/2017 - Present Mixed Model and Ensemble-based Learning for High-dimensional, Spatially-correlated Imbalanced Data

PhD Students Advised

Charles Spanbauer, 11/01/2018 - Present Machine Learning for Individualized Treatment Rules in Diabetes Treatment Using Bayesian Additive Regression Trees

<u>PhD</u>

Rachel Schlaak, 03/05/2019 - Present Identifying inherited genes that contribute to cardiac radiation sensitivity

Clinical/Research Fellows

Tourette A. Jackson, DrPH, 08/01/2014 - 08/01/2016 Primary care research

Faculty

Jacqueline Kulinski, MD, 09/01/2015 - 06/30/2017 CTSI Clinical Research Scholars

BIBLIOGRAPHY

Refereed Journal Publications/Original Papers

- Platelet Glycoprotein IIb/IIIa in Unstable Angina: Receptor Suppression Using Integrilin Therapy (PURSUIT) Trial Investigators. Inhibition of platelet glycoprotein IIb/IIIa with eptifibatide in patients with acute coronary syndromes. N Engl J Med. 1998 Aug 13;339(7):436-43.
- 2. McClure MW, Berkowitz SD, Sparapani R, Tuttle R, Kleiman NS, Berdan LG, Lincoff AM, Deckers J, Diaz R, Karsch KR, Gretler D, Kitt M, Simoons M, Topol EJ, Califf RM, Harrington RA. Clinical significance of thrombocytopenia during a non-ST-elevation acute coronary syndrome. The platelet glycoprotein IIb/IIIa in unstable angina: receptor suppression using integrilin therapy (PURSUIT) trial experience. Circulation. 1999 Jun 08;99(22):2892-900.
- 3. Alexander JH, Sparapani RA, Mahaffey KW, Deckers JW, Newby LK, Ohman EM, Corbalán R, Chierchia SL, Boland JB, Simoons ML, Califf RM, Topol EJ, Harrington RA. Association between minor elevations of creatine kinase-MB level and mortality in patients with acute coronary syndromes without ST-segment elevation. PURSUIT Steering Committee. Platelet Glycoprotein IIb/IIIa in Unstable Angina: Receptor Suppression Using Integrilin Therapy. JAMA. 2000 Jan 19;283(3):347-53.
- 4. . Comparison of sibrafiban with aspirin for prevention of cardiovascular events after acute coronary syndromes: a randomised trial. The SYMPHONY Investigators. Sibrafiban versus Aspirin to Yield Maximum Protection from Ischemic Heart Events Post-acute Coronary Syndromes. Lancet. 2000 Jan 29;355(9201):337-45.

- 5. Granger CB, Ertl G, Kuch J, Maggioni AP, McMurray J, Rouleau JL, Stevenson LW, Swedberg K, Young J, Yusuf S, Califf RM, Bart BA, Held P, Michelson EL, Sellers MA, Ohlin G, Sparapani R, Pfeffer MA. Randomized trial of candesartan cilexetil in the treatment of patients with congestive heart failure and a history of intolerance to angiotensin-converting enzyme inhibitors. Am Heart J. 2000 Apr;139(4):609-17.
- 6. Mahaffey KW, Roe MT, Dyke CK, Newby LK, Kleiman NS, Connolly P, Berdan LG, Sparapani R, Lee KL, Armstrong PW, Topol EJ, Califf RM, Harrington RA. Misreporting of myocardial infarction end points: results of adjudication by a central clinical events committee in the PARAGON-B trial. Second Platelet IIb/IIIa Antagonist for the Reduction of Acute Coronary Syndrome Events in a Global Organization Network Trial. Am Heart J. 2002 Feb;143(2):242-8.
- 7. Rossini AJ, Heiberger RM, Sparapani RA, Maechler M, Hornik K. Emacs speaks statistics: A multiplatform, multipackage development environment for statistical analysis. Journal of Computational & Graphical Statistics. 2004;13(1):247-61
- 8. Neuner JM, Gilligan MA, Sparapani R, Laud PW, Haggstrom D, Nattinger AB. Decentralization of breast cancer surgery in the United States. Cancer. 2004 Sep 15;101(6):1323-9.
- 9. Nattinger AB, Laud PW, Bajorunaite R, Sparapani RA, Freeman JL. An algorithm for the use of Medicare claims data to identify women with incident breast cancer. Health Serv Res. 2004 Dec;39(6 Pt 1):1733-49. PMCID: PMC1361095
- Smith TL, Mendolia-Loffredo S, Loehrl TA, Sparapani R, Laud PW, Nattinger AB. Predictive factors and outcomes in endoscopic sinus surgery for chronic rhinosinusitis. Laryngoscope. 2005 Dec;115(12):2199-205.
- 11. Etim AE, Schellhase KG, Sparapani R, Nattinger AB. Effect of model of care delivery on mammography use among elderly breast cancer survivors. Breast Cancer Res Treat. 2006 Apr;96(3):293-9.
- 12. Neuner JM, Binkley N, Sparapani RA, Laud PW, Nattinger AB. Bone density testing in older women and its association with patient age. J Am Geriatr Soc. 2006 Mar;54(3):485-9.
- Mendolia-Loffredo S, Laud PW, Sparapani R, Loehrl TA, Smith TL. Sex differences in outcomes of sinus surgery. Laryngoscope. 2006 Jul;116(7):1199-203.
- 14. Gilligan MA, Neuner J, Sparapani R, Laud PW, Nattinger AB. Surgeon characteristics and variations in treatment for early-stage breast cancer. Arch Surg. 2007 Jan;142(1):17-22.
- 15. Gilligan MA, Neuner J, Zhang X, Sparapani R, Laud PW, Nattinger AB. Relationship between number of breast cancer operations performed and 5-year survival after treatment for early-stage breast cancer. Am J Public Health. 2007 Mar;97(3):539-44. PMCID: PMC1805003
- 16. Ananthakrishnan AN, Schellhase KG, Sparapani RA, Laud PW, Neuner JM. Disparities in colon cancer screening in the Medicare population. Arch Intern Med. 2007 Feb 12;167(3):258-64.
- Neuner JM, Zhang X, Sparapani R, Laud PW, Nattinger AB. Racial and socioeconomic disparities in bone density testing before and after hip fracture. J Gen Intern Med. 2007 Sep;22(9):1239-45. PMCID: PMC2219762
- Nattinger AB, Laud PW, Sparapani RA, Zhang X, Neuner JM, Gilligan MA. Exploring the surgeon volume outcome relationship among women with breast cancer. Arch Intern Med. 2007 Oct 08;167(18):1958-63.
- Yen TW, Fan X, Sparapani R, Laud PW, Walker AP, Nattinger AB. A contemporary, population-based study of lymphedema risk factors in older women with breast cancer. Ann Surg Oncol. 2009 Apr;16(4):979-88. PMCID: PMC2729500
- 20. Yen TW, Sparapani RA, Guo C, Neuner JM, Laud PW, Nattinger AB. Elderly breast cancer survivors accurately self-report key treatment information. J Am Geriatr Soc. 2010 Feb;58(2):410-2. PMCID: PMC2972547
- 21. Nattinger AB, Pezzin LE, Sparapani RA, Neuner JM, King TK, Laud PW. Heightened attention to medical privacy: challenges for unbiased sample recruitment and a possible solution. Am J Epidemiol. 2010 Sep 15;172(6):637-44. PMCID: PMC3025645
- 22. Yen TW, Czypinski LK, Sparapani RA, Guo C, Laud PW, Pezzin LE, Nattinger AB. Socioeconomic factors associated with adjuvant hormone therapy use in older breast cancer survivors. Cancer. 2011 Jan 15;117(2):398-405. PMCID: PMC3010527
- 23. Neuner JM, Yen TW, Sparapani RA, Laud PW, Nattinger AB. Fracture risk and adjuvant hormonal therapy among a population-based cohort of older female breast cancer patients. Osteoporos Int. 2011 Nov;22(11):2847-55. PMCID: PMC3166362
- 24. Kong AL, Yen TW, Pezzin LE, Miao H, Sparapani RA, Laud PW, Nattinger AB. Socioeconomic and racial differences in treatment for breast cancer at a low-volume hospital. Ann Surg Oncol. 2011

Oct;18(11):3220-7. PMCID: PMC3201787

- 25. Wang MC, Shivakoti M, Sparapani RA, Guo C, Laud PW, Nattinger AB. Thirty-day readmissions after elective spine surgery for degenerative conditions among US Medicare beneficiaries. Spine J. 2012 Oct;12(10):902-11.
- 26. Yen TW, Laud PW, Sparapani RA, Nattinger AB. Surgeon specialization and use of sentinel lymph node biopsy for breast cancer. JAMA Surg. 2014 Feb;149(2):185-92. PMCID: PMC4005375
- 27. Yen TW, Laud PW, Sparapani RA, Li J, Nattinger AB. An algorithm to identify the development of lymphedema after breast cancer treatment. J Cancer Surviv. 2015 Jun;9(2):161-71. PMCID: PMC4362809
- 28. Santana-Davila R, Devisetty K, Szabo A, Sparapani R, Arce-Lara C, Gore EM, Moran A, Williams CD, Kelley MJ, Whittle J. Cisplatin and etoposide versus carboplatin and paclitaxel with concurrent radiotherapy for stage III non-small-cell lung cancer: an analysis of Veterans Health Administration data. J Clin Oncol. 2015 Feb 20;33(6):567-74. PMCID: PMC4322259
- 29. Ponce DM, Eapen M, Sparapani R, O'Brien TA, Chan KW, Chen J, Craddock J, Schultz KR, Wagner JE, Perales MA, Barker JN. In Vivo T Cell Depletion with Myeloablative Regimens on Outcomes after Cord Blood Transplantation for Acute Lymphoblastic Leukemia in Children. Biol Blood Marrow Transplant. 2015 Dec;21(12):2173-2179. PMCID: PMC4639413
- 30. Sparapani RA, Logan BR, McCulloch RE, Laud PW. Nonparametric survival analysis using Bayesian Additive Regression Trees (BART). Stat Med. 2016 Jul 20;35(16):2741-53. PMCID: PMC4899272
- 31. Chaudhury S, Sparapani R, Hu ZH, Nishihori T, Abdel-Azim H, Malone A, Olsson R, Hamadani M, Daly A, Bacher U, Wirk BM, Kamble RT, Gale RP, Wood WA, Hale G, Wiernik PH, Hashmi SK, Marks D, Ustun C, Munker R, Savani BN, Alyea E, Popat U, Sobecks R, Kalaycio M, Maziarz R, Hijiya N, Saber W. Outcomes of Allogeneic Hematopoietic Cell Transplantation in Children and Young Adults with Chronic Myeloid Leukemia: A CIBMTR Cohort Analysis. Biol Blood Marrow Transplant. 2016 Jun;22(6):1056-1064. PMCID: PMC4877686
- 32. Yen TWF, Li J, Sparapani RA, Laud PW, Nattinger AB. The interplay between hospital and surgeon factors and the use of sentinel lymph node biopsy for breast cancer. Medicine (Baltimore). 2016 Aug;95(31):e4392. PMCID: PMC4979807
- 33. Yen TW, Pezzin LE, Li J, Sparapani R, Laud PW, Nattinger AB. Effect of hospital volume on processes of breast cancer care: A National Cancer Data Base study. Cancer. 2017 May 15;123(6):957-966.
- 34. Nishijima Y, Cao S, Chabowski DS, Korishettar A, Ge A, Zheng X, Sparapani R, Gutterman DD, Zhang DX. Contribution of K_V1.5 Channel to Hydrogen Peroxide-Induced Human Arteriolar Dilation and Its Modulation by Coronary Artery Disease. Circ Res. 2017 Feb 17;120(4):658-669. PMCID: PMC5315616
- 35. Karagodin I, Aba-Omer O, Sparapani R, Strande JL. Aortic stiffening precedes onset of heart failure with preserved ejection fraction in patients with asymptomatic diastolic dysfunction. BMC Cardiovasc Disord. 2017 Feb 14;17(1):62. PMCID: PMC5310057
- 36. Inoue YY, Soliman EZ, Yoneyama K, Ambale-Venkatesh B, Wu CO, Sparapani R, Bluemke DA, Lima JAC, Ashikaga H. Electrocardiographic Strain Pattern Is Associated With Left Ventricular Concentric Remodeling, Scar, and Mortality Over 10 Years: The Multi-Ethnic Study of Atherosclerosis. J Am Heart Assoc. 2017 Sep 20;6(9). PMCID: PMC5634304
- 37. Yen TWF, Laud PW, Pezzin LE, McGinley EL, Wozniak E, Sparapani R, Nattinger AB. Prevalence and Consequences of Axillary Lymph Node Dissection in the Era of Sentinel Lymph Node Biopsy for Breast Cancer. Med Care. 2018 Jan;56(1):78-84. PMCID: PMC5725235
- Logan BR, Sparapani R, McCulloch RE, Laud PW. Decision making and uncertainty quantification for individualized treatments using Bayesian Additive Regression Trees. Stat Methods Med Res. 2019 Apr;28(4):1079-1093. PMCID: PMC6028324
- 39. Singh S, Sparapani R, Wang MC. Variations in 30-day readmissions and length of stay among spine surgeons: a national study of elective spine surgery among US Medicare beneficiaries. J Neurosurg Spine. 2018 Sep;29(3):286-291.
- 40. Rusch M, Adams SJ, Azam L, Sparapani R, Meurer J, Wallace J. Determinants of unhealthy behaviors following bariatric surgery Obesity Open Access. Obesity Open Access 2016; 2(3): 1-7.
- 41. Tarima S., Tarassenko P., Tuyishimire B., Sparapani R., Rein L., Meurer J. Signs of Residuals for Testing Coefficients in Quantile Regression . In: Pilz J., Rasch D., Melas V., Moder K. (eds) Statistics and Simulation. IWS 2015. Springer Proceedings in Mathematics & Statistics, vol 231. Springer, Cham.
- 42. Sparapani RA, Rein LE, Tarima SS, Jackson TA, Meurer JR. Non-parametric recurrent events analysis with BART and an application to the hospital admissions of patients with diabetes. Biostatistics. 2020 Jan

01;21(1):69-85. PMCID: PMC6920553

- 43. Sparapani R, Logan BR, McCulloch RE, Laud PW. Nonparametric competing risks analysis using Bayesian Additive Regression Trees. Stat Methods Med Res. 2020 Jan;29(1):57-77. PMCID: PMC6954340
- 44. Sparapani R, Dabbouseh NM, Gutterman D, Zhang J, Chen H, Bluemke DA, Lima JAC, Burke GL, Soliman EZ. Detection of Left Ventricular Hypertrophy Using Bayesian Additive Regression Trees: The MESA. J Am Heart Assoc. 2019 Mar 05;8(5):e009959. PMCID: PMC6474924
- 45. George E, Laud P, Logan B, McCulloch R, Sparapani R. Fully Nonparametric Bayesian Additive Regression Trees. Advances in Econometrics. (in press).
- 46. Tarima S, Tarassenko P, Tuyishimire B, Sparapani R, Rein L, Meurer J. Signs of residuals for testing coefficients in quantile regression Springer Proceedings in Mathematics and Statistics. 2018;231:219-230.
- 47. Nattinger AB, Laud PW, Bajorunaite R, Sparapani RA, Freeman JL. Erratum: Clarification note to an algorithm for the use of medicare claims data to identify women with incident breast cancer (Health Services Research (December 2004) 39, 6, 1 (1733-1750)) Health Services Research. February 2006;41(1):302.
- 48. Rossini AJ, Heiberger RM, Sparapani RA, Mächler M, Hornik K. Emacs Speaks Statistics: A Multiplatform, Multipackage Development Environment for Statistical Analysis Journal of Computational and Graphical Statistics. March 2004;13(1):247-261.
- 49. Sparapani R, Spanbuer C, McCulloch R. Nonparametric machine learning and efficient computation with Bayesian Additive Regression Trees: the BART R package Journal of Statistical Software. (in press).
- 50. Tarima S, Tuyishimire B, Sparapani R, Rein L, Meurer J. Estimation Combining Unbiased and Possibly Biased Estimators Journal of Statistical Theory and Practice. 1 June 2020;14(2).
- 51. Singh B, Kosuru R, Lakshmikanthan S, Sorci-Thomas MG, Zhang DX, Sparapani R, Vasquez-Vivar J, Chrzanowska M. Endothelial Rap1 (Ras-Association Proximate 1) Restricts Inflammatory Signaling to Protect From the Progression of Atherosclerosis. Arterioscler Thromb Vasc Biol. 2021 Feb;41(2):638-650. PMCID: PMC8105264
- 52. Sparapani R, Spanbauer C, McCulloch R. Nonparametric machine learning and efficient computation with bayesian additive regression trees: The bart r package Journal of Statistical Software. 2021;97(1):1-66.
- 53. Spanbauer C, Sparapani R. Nonparametric machine learning for precision medicine with longitudinal clinical trials and Bayesian additive regression trees with mixed models Statistics in Medicine. 2021.
- 54. Spanbauer C, Sparapani R. Nonparametric machine learning for precision medicine with longitudinal clinical trials and Bayesian additive regression trees with mixed models. Stat Med. 2021 May 20;40(11):2665-2691.
- 55. Cotter A, Kim J, Semons-Booker K, Sherman K, Sparapani R, Whittle J. Influence of mid-life cognitive activity on cognitive function among men aged 68 years or older. Aging Clin Exp Res. 2021 Oct;33(10):2689-2694. PMCID: PMC8463627
- 56. Logan BR, Maiers MJ, Sparapani RA, Laud PW, Spellman SR, McCulloch RE, Shaw BE. Optimal Donor Selection for Hematopoietic Cell Transplantation Using Bayesian Machine Learning. JCO Clin Cancer Inform. 2021 May;5:494-507. PMCID: PMC8443829
- 57. Kulinski J, Ofori EK, Visotcky A, Smith A, Sparapani R, Fleg JL. Effects of music on the cardiovascular system. Trends Cardiovasc Med. 2022 Aug;32(6):390-398. PMCID: PMC8727633
- 58. Morris RS, Tignanelli CJ, deRoon-Cassini T, Laud P, Sparapani R. Improved Prediction of Older Adult Discharge After Trauma Using a Novel Machine Learning Paradigm. J Surg Res. 2022 Feb;270:39-48.
- 59. Nishijima Y, Hader SN, Hanson AJ, Zhang DX, Sparapani R, Gutterman DD, Beyer AM. Prolonged endothelial-dysfunction in human arterioles following infection with SARS-CoV-2. Cardiovasc Res. 2022 Jan 07;118(1):18-19. PMCID: PMC8689948
- 60. Ortiz de Choudens S, Sparapani R, Narayanan J, Lohr N, Gao F, Fish BL, Zielonka M, Gasperetti T, Veley D, Beyer A, Olson J, Jacobs ER, Medhora M. Lisinopril Mitigates Radiation-Induced Mitochondrial Defects in Rat Heart and Blood Cells. Front Oncol. 2022;12:828177. PMCID: PMC8924663
- 61. Brown SA, Sparapani R, Osinski K, Zhang J, Blessing J, Cheng F, Hamid A, Berman G, Lee K, BagheriMohamadiPour M, Lal JC, Kothari AN, Caraballo P, Noseworthy P, Johnson RH, Hansen K, Sun LY, Crotty B, Cheng YC, Olson J, Cardio-Oncology Artificial Intelligence Informatics & Precision (CAIP) Research Team Investigators. Establishing an interdisciplinary research team for cardio-oncology artificial intelligence informatics precision and health equity. Am Heart J Plus. 2022 Jan;13. PMCID: PMC9012235
- 62. Dellinger MJ, Pingatore N, Chelius T, Visotcky A, Sparapani R, Ripley M. Environmental health literacy for

Anishinaabe (Great Lakes Native American) fish consumers: A randomized control trial. Environ Res. 2022 Sep;212(Pt B):113335.

- 63. Sparapani RA, Teng BQ, Hilbrands J, Pipkorn R, Feuling MB, Goday PS. Novel Pediatric Height Outlier Detection Methodology for Electronic Health Records via Machine Learning With Monotonic Bayesian Additive Regression Trees. J Pediatr Gastroenterol Nutr. 2022 Aug 01;75(2):210-214.
- 64. Yen TW, Li J, Sparapani RA. Erratum: The interplay between hospital and surgeon factors and the use of sentinel lymph node biopsy for breast cancer (Medicine and Science in Sports and Exercise (2016) 95:31 (e4392) DOI: 10.1097/MD.00000000004392) Medicine (United States). 1 October 2016;95(42):e76a7.
- 65. George E, Laud P, Logan B, McCulloch R, Sparapani R. FULLY NONPARAMETRIC BAYESIAN ADDITIVE REGRESSION TREES Advances in Econometrics. 2019;40B:89-110.
- 66. Handler SS, Chan T, Ghanayem NS, Rudd N, Wright G, Visotcky A, Sparapani R, Mitchell ME, Hoffman GM, Frommelt MA. Impact of Reintervention During Stage 1 Palliation Hospitalization: A National, Multicenter Study. Ann Thorac Surg. 2023 Apr;115(4):975-981.
- 67. Dellinger MJ, Pingatore N, Chelius T, Visotcky A, Poupart A, Sparapani R. An Exploration of Cultural-Environmental Interactions with Native American Health Literacy. Environ Health Perspect. 2022 Nov;130(11):117703. PMCID: PMC9683091
- 68. Hartfield PJ, Janczy J, Sharma A, Newsome HA, Sparapani RA, Rhee JS, Woodson BT, Garcia GJM. Anatomical determinants of upper airway collapsibility in obstructive sleep apnea: a systematic review and meta-analysis Sleep Medicine Reviews.
- 69. Hartfield PJ, Janczy J, Sharma A, Newsome HA, Sparapani RA, Rhee JS, Woodson BT, Garcia GJM. Anatomical determinants of upper airway collapsibility in obstructive sleep apnea: A systematic review and meta-analysis. Sleep Med Rev. 2023 Apr;68:101741.
- 70. Brown SA, Chung BY, Doshi K, Hamid A, Pederson E, Maddula R, Hanna A, Choudhuri I, Sparapani R, Bagheri Mohamadi Pour M, Zhang J, Kothari AN, Collier P, Caraballo P, Noseworthy P, Arruda-Olson A, Cardio-Oncology Artificial Intelligence Informatics and Precision Equity (CAIPE) Research Team Investigators. Patient similarity and other artificial intelligence machine learning algorithms in clinical decision aid for shared decision-making in the Prevention of Cardiovascular Toxicity (PACT): a feasibility trial design. Cardiooncology. 2023 Jan 23;9(1):7. PMCID: PMC9869606
- 71. Garcia GJM, Wolf JJ, Campbell DA, Bailey RS, Sparapani RA, Welzig CM, Woodson BT. Mandibular advancement reduces pharyngeal collapsibility by enlarging the airway rather than affecting velopharyngeal compliance. Physiol Rep. 2023 Feb;11(3):e15558. PMCID: PMC9909385
- 72. Sparapani RA, Logan BR, Maiers MJ, Laud PW, McCulloch RE. Nonparametric failure time: Time-to-event machine learning with heteroskedastic Bayesian additive regression trees and low information omnibus Dirichlet process mixtures. Biometrics. 2023 Dec;79(4):3023-3037. PMCID: PMC10505620
- 73. Pokrzywa CJ, Al Tannir AH, Sparapani R, Rabas MS, Holena D, Murphy PB, Creutzfeldt CJ, Somberg L, Nattinger A, Morris RS. The Variation of Withdrawal of Life Sustaining Therapy in Older Adults With Traumatic Brain Injury. J Surg Res. 2023 Nov;291:34-42.
- 74. Brown SA, Sparapani R, Osinski K, Zhang J, Blessing J, Cheng F, Hamid A, MohamadiPour MB, Lal JC, Kothari AN, Caraballo P, Noseworthy P, Johnson RH, Hansen K, Sun LY, Crotty B, Cheng YC, Echefu G, Doshi K, Olson J. Team principles for successful interdisciplinary research teams American Heart Journal Plus: Cardiology Research and Practice. August 2023;32.
- 75. Bagheri-Mohamadi-Pour M, Sparapani R, Zhang J, Kulinski J. A Statistical Comparison of Heart Rate Variability Measurements Between Devices: Chest Strap Versus Finger Probe Computing in Cardiology. 2023.
- 76. D'Souza A, Singh A, Szabo A, Lian Q, Pezzin L, Sparapani R. Timing and co-occurrence of symptoms prior to a diagnosis of light chain (AL) amyloidosis. Res Sq. 2024 Jan 03. PMCID: PMC10802702
- Polovneff A, Shah N, Janardan A, Smith E, Pasillas I, Mortensen N, Holt JM, Somai M, Sparapani R, Crotty B. Scaling care coordination through digital engagement: stepped-wedge trial assessing readmissions. Am J Manag Care. 2024 Feb 01;30(2):e32-e38.
- 78. Brown SA, Sparapani R, Osinski K, Zhang J, Blessing J, Cheng F, Hamid A, MohamadiPour MB, Lal JC, Kothari AN, Caraballo P, Noseworthy P, Johnson RH, Hansen K, Sun LY, Crotty B, Cheng YC, Echefu G, Doshi K, Olson J, Cardio-Oncology Artificial Intelligence Informatics & Precision (CAIP) Research Team Investigators. Team principles for successful interdisciplinary research teams. Am Heart J Plus. 2023 Aug;32:100306. PMCID: PMC10946054
- 79. Patel S, Visotcky A, Devine A, Kode V, Kotlo S, Aljadah M, Sparapani R, Kulinski J. Prevalence, Predictors, and Outcomes of Type 2 NSTEMI in Hospitalized Patients With COVID-19. J Am Heart

Assoc. 2024 May 10:e032572.