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Carole and Lawrence Sirovich Professor of Public Health  
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## EDUCATION

1987	BS	Mathematics	University of Connecticut
1991	MS	Statistics	University of Southern California
1995	ScD	Biostatistics	Harvard University

Dissertation: *Mixture Models for Joint Distribution of Repeated Measures and Event Times*  
Advisor: Nan Laird

## ACADEMIC APPOINTMENTS

1995 – 1999 **Assistant Professor of Biostatistics (Research Track)**, Brown University  
1999 – 2003 **Assistant Professor of Biostatistics (Tenure Track)**, Brown University  
2001 – 2003 **Manning Assistant Professor**, Brown University  
2003 – 2008 **Associate Professor of Biostatistics (Tenured)**, Brown University  
2005 (Spring) **Visiting Scholar**. Department of Mathematics, UC San Diego and Health Services Research & Development Unit, VA Hospital, San Diego  
2010 (Spring) **Visiting Scholar**, Moi University and AMPATH, Eldoret, Kenya  
2008 – pres. **Professor of Biostatistics (Tenured)**, Brown University  
2017 – pres. **Carole and Lawrence Sirovich Professor of Public Health**, Brown University

## ACADEMIC LEADERSHIP POSITIONS

1999 – pres. **Biostatistics Core Co-Director**, Providence-Boston Center for AIDS Research  
2003 (Spring) **Acting Director**, Center for Statistical Sciences, Brown University  
2003 – 2011 **Director of Graduate Studies**, Biostatistics Graduate Program, Brown University  
2008 – pres. **Co-Director of Biostatistics**, AMPATH Consortium Research Program (US/Kenya)  
2009 (Fall) **Acting Section Head**, Biostatistics Section, Program in Public Health, Brown U  
2010 – 2016 **Biostatistics Core Director**, Alcohol Research Center in HIV (ARCH), Brown U  
2013 (Fall) **Acting Chair**, Department of Biostatistics, Brown University  
2013 – 2015 **Design & Analysis Core Director**, Center for Nervous System Function, Brown U  
2015 – 2016 **Associate Dean for Faculty Affairs**, School of Public Health, Brown University  
2017 – 2018 **Chair**, Department of Biostatistics, Brown University  
2017 – pres. **Deputy Director**, Data Science Initiative, Brown University  
2020 – pres. **Chair**, Department of Biostatistics, Brown University

## JOINT APPOINTMENTS AND AFFILIATIONS

1996 – pres. **Core Faculty Member**, Population Studies and Training Center, Brown University

- 1996 – 1999 **Assistant Professor (Research)**. Department of Ob/Gyn, Brown University  
 1999 – 2003 **Assistant Professor**. Department of Obstetrics & Gynecology, Brown University  
 2003 – 2008 **Associate Professor**. Department of Obstetrics & Gynecology, Brown University  
 2014 – pres. **Training Faculty**, Center for Alcohol and Addiction Studies, Brown University

#### CONSULTING

- 1995 Pfizer, Inc.  
 1995 – 1996 McKinney Project, University of Massachusetts - Boston  
 1996 – 2004 RI Department of Health and MCH Evaluation  
 2003 Bristol-Myers Squibb, Inc.  
 2005 – 2006 Novartis Pharmaceuticals  
 2006 – 2011 World Health Organization  
 2008 Rhode Island Foundation  
 2011 – 2012 Forest Laboratories, Jersey City NJ  
 2013 American Research Institute  
 2016 Merck  
 2017 Johnson & Johnson

#### EDITORIAL POSITIONS

- 1997 – 2005 **Associate Editor**, *Biometrics*  
 2001 – 2009 **Associate Editor**, *Lifetime Data Analysis*  
 2001 – 2012 **Associate Editor**, *Biostatistics*  
 2012 – 2017 **Associate Editor**, *Journal of the American Statistical Association (A&CS)*  
 2015 – 2017 **Statistical Editor**, *American Journal of Obstetrics & Gynecology*  
 2014 – pres. **Associate Editor**, *Observational Studies*  
 2019 – pres. **Statistical Editor**, *New England Journal of Medicine*

#### OTHER PROFESSIONAL POSITIONS

- 1987 – 1989 **Mathematics Teacher**, St Monica High School, Santa Monica CA  
 1989 **Girls Basketball Coach (JV)**, Notre Dame Academy, Los Angeles  
 1987 – 1991 **Mathematics Instructor**, Project Upward Bound, Occidental College, Los Angeles  
 1993 – 1995 **Freshman Proctor (Advisor)**, Harvard College, Cambridge MA

#### ACADEMIC HONORS & AWARDS

- 1987 **Honors Scholar in Mathematics**, University of Connecticut  
 1991 **Outstanding Teaching Assistant in Mathematics**, University of Southern California  
 1991 – 1993 **NIH National Research Service Award**, Harvard University  
 1994 **Student Travel Award**, Biometric Society Spring Meetings  
 2001– 2003 **Manning Assistant Professorship**, Brown University  
 2008 **Fellow of the American Statistical Association**  
 2019 **Outstanding Statistical Application Award**, American Statistical Association

2020

Lagakos Distinguished Alumni Award, Dept of Biostatistics, Harvard University

**MEMBERSHIP IN PROFESSIONAL SOCIETIES**

American Statistical Association

Institute of Mathematical Statistics

International Biometric Society (ENAR)

American Association for the Advancement of Science

**PUBLICATIONS** (\* denotes trainee coauthor; § denotes co-senior author)**A. Articles in peer-reviewed journals**

1. Colpaert C, **Hogan JW**, Genest D, Roberts D, Reid L, Kozakewich H (1995). Increased muscularization of small pulmonary arteries in preterm infants of diabetic mothers. *Pediatric Pathology and Laboratory Medicine* 15, 689-705. PMID: 8597856
2. **Hogan JW**, Laird NM (1996). Intent-to-treat analysis for incomplete repeated measures data. *Biometrics* 52, 1002-1017. PMID: 8805765
3. Peipert JF, Boardman L, **Hogan JW**, Sung J, Mayer KH (1996). Laboratory evaluation of acute upper genital tract infection, *Obstetrics and Gynecology* 87, 730-736. PMID: 8677076
4. **Hogan JW**, Laird NM (1997). Mixture models for the joint distribution of repeated measures and event times. *Statistics in Medicine* 16, 239-258. PMID: 9004395
5. **Hogan JW**, Laird NM (1997). Model-based approaches to analyzing incomplete repeated measures and failure time data. *Statistics in Medicine* 16, 259-271. PMID: 9004396
6. Frishman GN, Canick JA, **Hogan JW**, Hackett RJ, Kellner LH, Saller DN (1997). Serum triple-marker screening in *in vitro* fertilization and naturally conceived pregnancies. *Obstetrics & Gynecology* 90, 98-101. PMID: 9207822
7. Star J, Rosene K, Ferland J, DiLeone G, **Hogan JW**, Kestin A (1997). Flow cytometric analysis of platelet activation throughout normal gestation. *Obstetrics & Gynecology* 90, 562-568. PMID: 9380316
8. Seifer DB, Lambert-Messerlian G, **Hogan JW**, Gardiner AC, Blazar AS, Berk CA (1997). Day 3 serum inhibin-B is predictive of assisted reproductive technologies outcome. *Fertility and Sterility* 67, 110-114. PMID: 8986693
9. Blazar AS, **Hogan JW**, Seifer DB, Frishman GN, Wheeler CA, Haning RV (1997). The impact of hydrosalpinx on successful pregnancy in tubal factor infertility by *in vitro* fertilization. *Fertility and Sterility* 67, 517-520. PMID: 9091340
10. Frishman G, Schwartz T, **Hogan JW** (1997). Closure of Pfannensteil skin incisions: staples versus subcuticular suture. *Journal of Reproductive Medicine* 42, 627-630.
11. Clark MA, Rakowski W, Kviz FJ, **Hogan JW** (1997). Age and stage of readiness for smoking cessation. *Journal of Gerontology: Social Sciences* 52B, S212-S221.
12. DiSilvestro P, Peipert JF, **Hogan JW**, Granai CO (1997). Prognostic value of clinical variables in ovarian cancer. *Journal of Clinical Epidemiology* 50, 501-505.
13. Gordinier ME, Steinhof M, **Hogan JW**, Peipert JF, Gajewski WH, Granai CO (1997). S-phase fraction, p53 mutation, and HER-2/neu status as predictors of nodal metastasis in early vulvar cancer. *Gynecologic Oncology* 67, 200-202.

14. **Hogan JW**, Laird NM (1998). Increasing efficiency from censored survival data using random effects from longitudinal covariates. *Statistical Methods in Medical Research* 7, 28-48. PMID: 9533260
15. Yao Q, Wei LJ, **Hogan JW** (1998). Analysis of incomplete repeated measurements with dependent censoring times. *Biometrika* 85, 139-150.
16. McGrath ME, **Hogan JW**, Peipert JF (1998). A prevalence study of abuse and screening for abuse in urgent care patients. *Obstetrics & Gynecology* 91, 511-514.
17. Myers DL, LaSala CA, **Hogan JW**, Rosenblatt PL (1998). The effect of posterior wall support defects on urodynamic parameters in stress urinary incontinence. *Obstetrics Gynecology* 91, 710-714.
18. **Hogan JW**, Peipert JF (1998). Power and sample size. *Clinical Obstetrics and Gynecology* 41, 257-266.
19. Silver HM, Lambert-Messerlian GM, Star JA, **Hogan JW**, Canick JA (1999). Comparison of maternal serum total activin A and inhibin A in normal, preeclamptic and non-proteinuric gestational hypertensive pregnancy. *American Journal of Obstetrics Gynecology* 180, 1131-1137.
20. Clark MA, **Hogan JW**, Kviz FJ, Prochaska TR (1999). Age and the role of symptomatology in readiness to quit smoking. *Addictive Behaviors* 24, 1-16.
21. Griffin J, **Hogan JW**, Buechner J, Leddy T (1999). The effect of a Medicaid managed-care program on the adequacy of prenatal care. *American Journal of Public Health* 89, 497-501.
22. Dexter SC, Malee MP, Pinar H, **Hogan JW**, Carpenter MW, Vohr BR (1999). Influence of chorioamnionitis on developmental outcome in very low birth weight infants. *Obstetrics & Gynecology* 94, 267-273.
23. Peipert JF, **Hogan JW**, Gifford D, Chase E, Randall R (1999). Strength of indication for cesarean delivery: a comparison of private physicians and resident service labor management. *American Journal of Obstetrics & Gynecology* 181, 435-439.
24. Flanigan TP, **Hogan JW**, Smith D, Schoenbaum E, Vlahov D, Schuman P, Mayer K (1999). Self-reported bacterial infections among HIV seropositive and at-risk women. *Clinical Infectious Diseases* 29, 608-612.
25. Cu S, **Hogan JW**, Warren D, Klein RS, Peipert J, Schuman P, Holmberg S, Anderson J, Schoenbaum E, Vlahov D, Mayer K (1999). Prevalence of lower genital tract infections among HIV-seropositive and high-risk HIV-seronegative women. *Clinical Infectious Diseases* 29, 1145-1150.
26. Boardman LA, Peipert JF, **Hogan JW**, Cooper AS (1999). Positive cone biopsy specimen margins in women infected with the human immunodeficiency virus. *American Journal of Obstetrics and Gynecology* 181, 1395-1399. PMID: 10601919
27. Star J, **Hogan JW**, Sosa MEB, Carpenter MW (2000). Glucocorticoid-associated maternal hyperglycemia: a randomized trial of insulin prophylaxis. *Journal of Maternal Fetal Medicine* 9, 273-277.
28. Phipps MG, **Hogan JW**, Peipert JF, Messerlian G, Canick JA, Seifer DB (2000). Progesterone, inhibin, and hCG multiple marker strategies to differentiate viable from nonviable pregnancies. *Obstetrics & Gynecology* 95, 227-231.
29. **Hogan JW**, Blazar AB (2000). Hierarchical logistic regression models for clustered binary outcomes in IVF-ET. *Fertility and Sterility* 73, 575-581.
30. Daniels MJ, **Hogan JW** (2000). Reparameterizing the pattern mixture model for sensitivity analysis under informative dropout. *Biometrics* 56, 1241-1248.

31. Yasuhi I, **Hogan JW**, Canick JA, Sosa MB, Carpenter MW (2001). Midpregnancy serum C-peptide concentration and subsequent pregnancy-induced hypertension. *Diabetes Care* 24, 743-747.
32. Fiore T, Flanigan T, **Hogan JW**, Cram R, Schuman P, Schoenbaum E, Solomon L, Moore J. HIV Infection in families of HIV positive and 'at-risk' HIV-negative women (2001). *AIDS Care* 13, 209-214.
33. Krieger N, Waterman P, Lemieux K, Zierler S, **Hogan JW** (2001). On the wrong side of the tracks? Evaluating accuracy of geocoding for public health research. *American Journal of Public Health* 91, 1114-1117.
34. Vivier PM, **Hogan JW**, Simon P, Leddy T, Dansereau LM, Alario AJ (2001). A statewide assessment of lead screening histories of preschool children enrolled in a Medicaid managed care program. *Pediatrics* 108, e29.
35. Cu S, **Hogan JW**, Caliendo AM, Mayer KH, Carpenter CCJ (2001). Association between bacterial vaginosis and expression of HIV-1 RNA in the female genital tract. *Clinical Infectious Diseases* 33, 894-896.
36. Carpenter MW, Canick JA, **Hogan JW**, Shellum C, Somers M, Star JA (2001). Amniotic fluid insulin at 14-20 weeks gestation: association with later maternal glucose intolerance and birth macrosomia. *Diabetes Care* 24, 1259-1263. [PMID 11315841] [DOI]
37. Tashima KT, **Hogan JW**, Gardner LI, Korkontzelou C, Schoenbaum E, Schuman P, Rompalo A, Carpenter CCJ. (2001). A longitudinal analysis of hospitalization and emergency room utilization among HIV-infected women reporting protease inhibitor use between 1995-1999. *Clinical Infectious Diseases* 33, 2055-2060.
38. Stone VE, **Hogan JW**, Schuman P, Rompalo AM, Howard AA, Korkontzelou C, Smith DK (2001). Antiretroviral regimen complexity, self-reported adherence, and HIV patients' understanding of their regimens: A survey of women in the HER Study. *Journal of Acquired Immune Deficiency Syndrome (JAIDS)* 28, 124-131.
39. Borrelli B, **Hogan JW**, Bock B, Pinto B, Roberts M, Marcus B (2002). Predictors of quitting and dropout among women in a clinic-based smoking cessation program. *Psychology of Addictive Behaviors* 16, 22-27.
40. Allen S, Shah AC, Nezu AM, Nezu CM, Ciambrone D, **Hogan JW**, Mor V (2002). A problem-solving approach to stress reduction among younger women with breast cancer: A randomized controlled trial. *Cancer* 94, 3089-3100.
41. Cu-Uvin S, \***Ko H**, Jamieson DJ, **Hogan JW**, Schuman P, Anderson J, Klein RS (2002). Prevalence, incidence, and persistence or recurrence of trichomoniasis among HIV-positive and among HIV-negative women at high risk for HIV infection. *Clinical Infectious Diseases* 34, 1406-1411.
42. Olson CM, Rennie D, Cook D, Dickersin K, Flanagin A, **Hogan JW**, Zhu Q, Reiling J, Pace B (2002). Publication bias in editorial decision making. *Journal of the American Medical Association* 287, 2825-2828.
43. Sheu M, **Hogan JW**, Allsworth J, Stein M, Vlahov D, Schoenbaum EE, Schuman P, Gardner L, Flanigan T (2002). Continuity of medical care and risk of incarceration in HIV-positive and high-risk HIV-negative women. *Journal of Women's Health* 11, 743-750.
44. **Hogan JW**, Daniels MJ (2002). A hierarchical modeling approach to analyzing longitudinal data with dropout and treatment cessation, with application to an AIDS clinical trial. *Applied Statistics (JRSS-C)* 51, 1-21. DOI 10.1111/1467-9876.04615

45. **\*Dukic V, Hogan JW** (2002). A Bayesian hierarchical model of embryo implantation following in-vitro fertilization. *Biostatistics* 3, 361-377.
46. Marcus BH, Lewis BA, King TK, Albrecht AE, **Hogan JW**, Bock B, Parisi AF, Abrams DB (2003). Rationale, design, and baseline data for Commit to Quit II: An evaluation of the efficacy of moderate-intensity physical activity as an aid to smoking cessation in women. *Preventive Medicine* 36, 479-492.
47. Macalino GE, **\*Ko H**, Celentano DD, **Hogan JW**, Schoenbaum E, Schuman P, Rich J (2003). The effects of HIV serostatus on drug use patterns in women. *Journal of Acquired Immune Deficiency Syndrome (JAIDS)* 33, 500-505.
48. Mayer KH, **Hogan JW**, Smith D, Klein RS, Schuman P, Margolick JB, Korkontzelou C, Farzedegan H, Vlahov D, Carpenter CCJ (2003). Clinical and immunologic progression in HIV-infected US women before and after the introduction of highly active antiretroviral therapy. *Journal of Acquired Immune Deficiency Syndrome (JAIDS)* 33, 614-624. [[PMID 12902807](#)]
49. Jones CY, **Hogan JW**, Snyder B, Klein RS, Rompalo A, Schuman P, Carpenter CCJ for the HERS Study Group (2003). Overweight and human immunodeficiency virus (HIV) in women: Associations between HIV progression and changes in body mass index in women in the HIV Epidemiology Research Study Cohort. *Clinical Infectious Diseases* 37, S69-S80. [[PMID 12942377](#)] [[LINK](#)]
50. **\*Ko H, Hogan JW**, Mayer KH (2003). Estimating causal treatment effects from longitudinal HIV natural history studies using marginal structural models. *Biometrics* 59, 152-162. [[PMID 12762452](#)] [[DOI](#)]
51. Mahajan A, **Hogan JW**, Snyder B, Kumarasamy N, Mehta K, Solomon S, Carpenter CCJ, Mayer KH, Flanigan TP (2004). Change in total lymphocyte count as a surrogate for change in CD4 count following initiation of HAART: Implications for monitoring in resource-limited settings. *Journal of Acquired Immune Deficiency Syndrome (JAIDS)* 36, 567-575. [[PMID 15097299](#)] [[LINK](#)]
52. Allsworth JE, Zierler S, Lapane KL, Krieger N, **Hogan JW**, Harlow BL (2004). A longitudinal study of the inception of perimenopause in relation to lifetime history of sexual or physical violence. *Journal of Epidemiology and Community Health* 58, 938-943. [[PMCID 1732619](#)] [[PMID 15483311](#)] [[DOI](#)]
53. **Hogan JW**, Roy J, Korkontzelou C (2004). Biostatistics tutorial: Handling dropout in longitudinal data. *Statistics in Medicine*, 23, 1455-1497. [[PMID 15116353](#)] [[DOI](#)]
54. **Hogan JW**, Lancaster T (2004). Instrumental variables and inverse probability weighting for causal inference from longitudinal data. *Statistical Methods in Medical Research* 13, 17-48. [[PMID 14746439](#)] [[DOI](#)]
55. **Hogan JW**, Tchernis R (2004). Bayesian factor analysis for spatially correlated data, with application to deriving indices of deprivation from area-level census data. *Journal of the American Statistical Association* 99, 314-324. [[JSTOR](#)] [[DOI](#)]
56. **Hogan JW**, **\*Lee JY** (2004). Marginal structural quantile models for longitudinal observational studies with time-varying treatment. *Statistica Sinica* 14, 927-944. [[LINK](#)]
57. **Hogan JW**, Lin X, Herman B (2004). Mixtures of varying coefficient models for longitudinal data with discrete or continuous non-ignorable dropout. *Biometrics* 60, 854-864. [[PMCID 2677904](#)] [[PMID 15606405](#)] [[DOI](#)]
58. Viscidi RP, Snyder B, Cu-Uvin S, **Hogan JW**, Clayman B, Klein RS, Sobel J, Shah KV (2005). Human papillomavirus (HPV) capsid antibody response to natural infection and risk of subsequent HPV infection in human immunodeficiency virus-positive and -negative women. *Cancer Epidemiology Biomarkers and Prevention* 14, 283-288. [[PMID 15668510](#)] [[LINK](#)]

59. Mitty JA, Macalino GE, Bazerman LB, Loewenthal HG, **Hogan JW**, MacLeod CM, Flanigan TP (2005). The use of community-based modified directly-observed therapy for the treatment of HIV-infected persons. *Journal of AIDS* 39, 545-550. [[PMID 16044005](#)] [[LINK](#)]
60. Marcus BH, Lewis B, **Hogan JW**, King TK, Albrecht AE, Bock B, Parisi AF (2005). The efficacy of moderate-intensity exercise as an aid for smoking cessation in women: A randomized controlled trial. *Nicotine and Tobacco Research* 7, 871-880. [[PMID 16298722](#)] [[DOI](#)]
61. **Hogan JW**, Scharfstein DO (2006). Estimating causal effects from multiple cycle data in studies of in vitro fertilization (IVF). *Statistical Methods in Medical Research* 15, 195-209. [[PMID 16615657](#)] [[DOI](#)]
62. Roy J, Alderson D, **Hogan JW**, Tashima KT (2006). Conditional inference methods for incomplete Poisson data with endogenous time-varying covariates: Emergency department use among HIV-infected women. *Journal of the American Statistical Association* 101, 424-434. [[DOI](#)]
63. Cu Uvin S, Snyder B, Harwell JI, **Hogan JW**, Chibwesa C, Hanley D, Ingersoll I, Kurpewski J, Mayer KH, Caliendo AM (2006). Association between paired plasma and cervicovaginal HIV-1 RNA over 36 months. *Journal of AIDS* 42, 584-587. [[PMID 16837866](#)] [[DOI](#)]
64. Rich JD, **Hogan JW**, DeLong AK, Mehrotra M, Reinert SE, Wolf F (2007). Low risk syringe sharing and re-use after syringe legalization in Rhode Island. *Drug and Alcohol Dependence* 89, 292-297. [[PMID 17386980](#)] [[DOI](#)]
65. Macalino G, **Hogan JW**, Mitty JA, Bazerman LB, DeLong AK, Loewenthal HG, Caliendo AM, Flanigan TP (2007). A randomized clinical trial of community based directly observed therapy (MDOT) as an adherence intervention for highly active antiretroviral therapy (HAART) among substance users. *AIDS* 21, 1473-1477. [[PMID 17589194](#)] [[DOI](#)]
66. Marcus BH, Lewis BA, Williams DM, Whitely JA, Albrecht AE, Jakicic JM, Parisi AF, **Hogan JW**, Napolitano MA, Bock BC (2007). Step into Motion: a randomized trial examining the relative efficacy of internet vs. print-based physical activity interventions. *Contemporary Clinical Trials* 28, 737-747. [[PMID 17616486](#)] [[DOI](#)]
67. Roy J, **Hogan JW**, Marcus BH (2008). Principal stratification with predictors of compliance for randomized trials with two active treatments. *Biostatistics* 9, 277-289. [[PMID 17681993](#)] [[DOI](#)]
68. Kwara A, DeLong A, Rezk N, **Hogan JW**, Burtwell H, Chapman S, Moreira CC, Kurpewski J, Ingersoll J, Caliendo AM, Kashuba A, Cu-Uvin S (2008). Antiviral drug concentrations and HIV-1 RNA in the genital tract of HIV-infected women receiving long-term highly active antiretroviral therapy. *Clinical Infectious Diseases* 46, 719-725. [[PMID 18220480](#)] [[DOI](#)]
69. \***Su L, Hogan JW** (2008). Bayesian semiparametric regression for longitudinal binary processes with missing data. *Statistics in Medicine* 27, 3247-3268. [[PMC2581820](#)] [[PMID 18351709](#)] [[DOI](#)]
70. Merchant RC, Mayer KH, Becker BM, DeLong AK, **Hogan JW** (2008). Predictors of the initiation of HIV postexposure prophylaxis in Rhode Island emergency departments. *AIDS Patient Care: STDs* 22, 41-52. [[PMID 18095841](#)] [[DOI](#)]
71. Kantor R, DeLong A, Kamle L, Muyonga S, Mambo F, Emonyi W, Chan P, Carter EJ, **Hogan JW**, Buziba N (2009). Misclassification of first line antiretroviral treatment failure based on immunological monitoring of HIV infection in resource-limited settings. *Clinical Infectious Diseases* 49, 454-462. [[PMID 19569972](#)] [[DOI](#)]
72. Phelan S, Liu T, Gorin A, Lowe M, **Hogan JW**, Fava J, Wing RR (2010). What distinguishes weight-loss maintainers from the treatment-seeking obese? Analysis of environmental,

- behavioral and psychosocial variables in diverse populations. *Annals of Behavioral Medicine* 38, 94-104. [PMID 19847584] [DOI]
73. \*Su L, Hogan JW (2010). Varying coefficient models for longitudinal processes with continuous-time informative dropout. *Biostatistics* 11, 93-110. [PMID 19837655] [PMC2800163] [DOI]
  74. Cu-Uvin S, DeLong AK, Venkatesh K, Hogan JW, Ingersoll J, Kurpewski J, Deasquela MP, D'Aquila R, Caliendo A (2010). Genital tract HIV-1 RNA shedding among women on highly active antiretroviral therapy with below detectable plasma viral load. *AIDS* 24, 2489-2497. [PMID 20736815] [DOI]
  75. Wen X, Triche EW, Hogan JW, Shenassa ED, Buka SL (2010). Subgroups of small for gestational age based on maternal smoking status during pregnancy and adult hypercholesterolemia: A 40-year cohort study. *Epidemiology* 21, 786-790. [PMID 20798636] [DOI]
  76. \*Su L, Hogan JW (2011). HIV dynamics and natural history studies: Joint modeling with doubly interval-censored event times and infrequent longitudinal data. *Annals of Applied Statistics* 5, 400-426. [DOI] [arXiv] [PMID 27134691]
  77. Gezmu M, DeGruttola V, Dixon D, Essex M, Halloran E, Hogan JW, Grobler A, Kim S, McDermott J, McKaig R, Neaton J (2011). Strengthening biostatistics resources in Sub-Saharan Africa: Research collaborations through US partnerships. *Statistics in Medicine* 30, 695-708. [PMID 21394746] [DOI]
  78. Wen X, Triche E, Hogan JW, Shenassa E, Buka S (2011). Prenatal factors for childhood blood pressure mediated by intrauterine and/or childhood growth? *Pediatrics* 127, e713-721. [PMID 21300676] [DOI]
  79. Wen X, Triche EW, Hogan JW, Shenassa ED, Buka SL (2011). Association between placental morphology and childhood systolic blood pressure. *Hypertension* 57, 48-55. [PMID 21079045] [DOI]
  80. Tate DF, DeLong A, McCaffrey DE, Kertesz K, Paul RH, Conley J, Russell T, Coop K, Gillani F, Flanigan T, Tashima K, Hogan JW (2011). Recent clinical history and cognitive dysfunction for attention and executive function among human immunodeficiency virus-infected patients. *Archives of Clinical Neuropsychology* 26, 614-623. [PMID 21873325] [PMC 3243921] [DOI]
  81. Tate DF, Sampat M, Harezlak J, \*Fiecas M, Hogan JW, Dewey J, McCaffrey D, Branson D, Russell T, Conley C, Taylor M, Schifitto G, Zhong J, Daar ES, Alger J, Brown M, Singer E, Campbell T, McMahon D, Tso Y, Matesan J, Letendre S, Paulose S, Gaugh M, Tripoli C, Yiannoutsos C, Bigler ED, Cohen RA, Guttmann CRG, Navia B for the HIV Neuroimaging Consortium (2011). Regional areas and widths of the midsagittal corpus callosum among HIV-infected patients on stable antiretroviral therapies. *Journal of NeuroVirology* 17, 368-379. [DOI]
  82. Papas R, Sidle J, Gakinya B, Baliddawa J, Martino S, Mwanik M, Songole R, Omol O, Kamanda A, Ayuku D, Ojwang C, Owino-Ong'or W, Harrington M, Bryant K, Carroll K, Justice A, Hogan JW, Maisto S (2011). Treatment outcomes of a stage-1 cognitive-behavioral trial to reduce alcohol use among HIV-infected outpatients in western Kenya. *Addiction* 106, 2156-2166. [DOI]
  83. Bloomfield GS, Hogan JW, Keter A, Sang E, Carter EJ, Velazquez EJ, Kimaiyo S (2011). Hypertension and obesity as cardiovascular risk factors among HIV seropositive patients in western Kenya. *PLoS ONE* 6(7), e22288.
  84. Braitstein P, Siika A, Hogan JW, Kosgei R, Sang E, Sidle J, Wools-Kaloustian K, Keter A, Mamlin J, Kimaiyo S (2012). A clinician nurse model to reduce early mortality and increase clinic retention among high-risk HIV-infected patients initiating combination antiretroviral

- treatment. *Journal of the International AIDS Society* 15, e7. [PMID 22340703] [PMC3297518] [DOI]
85. DeLong AK, Wu M, Bennett D, Parkin N, Wu Z, **Hogan JW**, Kantor R (2012). Sequence Quality Analysis Tool (SQUAT) for HIV-1 protease and reverse transcriptase. *AIDS Research and Human Retroviruses* 28, 894-901. [PMID 21916749] [PMC3399557] [DOI]
  86. Ezeamama AE, McGarvey ST, **Hogan JW**, Lapane KL, Bellinger DC, Acosta LP, Leenstra T, Olveda RM, Kurtis JD, Friedman JF (2012). Treatment for *schistosoma japonicum*, reduction in intestinal parasite load, and cognitive test score improvements in school-aged children. *PLoS Neglected Tropical Diseases* 6(5), e1634. [DOI] [PMID 22563514] [PMC 3341324]
  87. Huang A, **Hogan JW**, Istrail S, DeLong A, Kantor R (2012). Global analysis of sequence diversity within HIV-1 subtypes across geographic regions. *Future Virology* 7, 505-517. [PMID 22822410] [PMC3400699] [DOI]
  88. Daniels MJ, Roy J, Kim C, **Hogan JW**, Perri M (2012). Bayesian inference for the causal effect of mediation. *Biometrics* 68, 1028-1036. [PMID 23005030] [DOI]
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## B. Book

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#### D. Papers submitted or in revision

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#### E. Commentary & Discussion

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11. Dean NE, **Hogan JW**, Schnitzer ME (2021). Covid-19 vaccine effectiveness and the test-negative design. *New England Journal of Medicine*, in press. DOI: 10.1056/NEJMe2113151

#### F. Coauthored Committee Reports

1. Committee on Asbestos: Selected Health Effects (2006). *Asbestos: Selected Cancers*. National Academies Press, Washington. [\[LINK\]](#)
2. Panel on Handling Missing Data in Clinical Trials. *The Prevention and Treatment of Missing Data in Clinical Trials* (2010). National Academies Press, Washington. [\[LINK\]](#)
3. Li T, Huftless S, Dickersin K, Scharfstein D, Neaton J, **Hogan JW**, Little RJ, Daniels MJ, Roy J, Mor V, Law A (2012). Minimal standards in the prevention and handling of missing data in observational and experimental patient-centered outcomes research. Guidance document prepared for Patient Centered Outcomes Research Institute (PCORI).

#### G. Book Reviews

1. **Hogan JW** (2010). Review of *Longitudinal Data Analysis* edited by G Fitzmaurice, M Davidian, G Verbeke and G Molenberghs. *Biometrics* 66, 995-996. [\[DOI\]](#)
2. **Hogan JW** (2019). Review of *Causal Inference in Statistics: A Primer*, by Pearl, Glymour and Jewell. *Biometrics* 75, 708-709. DOI: 10.1111/biom.13079

#### H. Letters

1. Hogan JW (1997). Statistics usage in the American Journal of Obstetrics and Gynecology. *American Journal of Obstetrics and Gynecology* **176**, 1118-1119.
2. Blazar AS, **Hogan JW**, Frankfurter D, Hackett R, Keefe DL (2004). Serum estradiol positively predicts outcomes in patients undergoing in vitro fertilization. *Fertility and Sterility* **81**, 1707-1708.

#### I. Opinion

1. 'In climate debate, charged words supplant reason'. *Providence Journal*, October 17, 2015. <http://www.providencejournal.com/article/20151017/OPINION/151019427>

**INVITED LECTURES AND PRESENTATIONS**

1. June 1994. Annual Meeting of the AIDS Clinical Trials Group, Washington.
2. December 1995. Psychiatric Epidemiology and Biostatistics Colloquium, Harvard Medical School.
3. March 1996. Institute for Statistics, Ludwig Maximilians University, Munich.
4. September 1996. Department of Statistics, University of Connecticut.
5. October 1996. Department of Epidemiology and Biostatistics, Yale University.
6. March 1997. Biometric Society (ENAR) Spring Meetings, Memphis.
7. April 1997. Department of Biostatistics, Harvard University.
8. November 1997. Department of Biostatistics, Harvard University.
9. February 1998. Society of Perinatal Obstetricians Annual Meeting, Miami.
10. April 1998. Department of Biostatistics, Johns Hopkins University.
11. April 1998. Department of Biostatistics, University of Rochester.
12. March 1999. Department of Biostatistics, Harvard University.
13. March 1999. Department of Mathematics and Statistics, Lancaster University, UK.
14. April 1999. Invited Panelist, Conference on Informatively Missing Data, Department of Statistics, Texas A&M University.
15. May 1999. Division of Biostatistics, Columbia University.
16. May 1999. Breast Cancer Research Grants Program, Massachusetts Department of Public Health, Boston.
17. November 1999. Department of Biostatistics, University of North Carolina.
18. February 2000. Workshop on Sensitivity Analysis for Dropout Models, Katholieke Universiteit Leuven (Belgium).
19. March 2000. Invited discussant, ENAR Spring Meetings, Chicago.
20. July 2000. Invited discussant, 20th International Biometric Society Conference, Berkeley.
21. September 2000. 21st Meeting, International Society of Clinical Biostatistics, Trento, Italy.
22. November 2000. Department of Mathematics and Statistics, Boston University.
23. November 2000. Gerontological Society of America Annual Meetings, Washington.
24. March 2001. Sero International Symposium on Frontiers in Reproductive Endocrinology, Washington.
25. April 2001. Department of Biostatistics, University of Pittsburgh.
26. April 2001. Department of Mathematics and Statistics, University of Massachusetts.
27. December 2001. Population Studies Training Center, Brown University.
28. February 2002. Department of Biostatistics, Columbia University.
29. February 2002. Department of Community Health, Brown University.
30. March 2002. Invited discussant, ENAR Spring Meetings, Arlington VA.
31. April 2002. Center for AIDS Research Colloquium, Miriam Hospital, Brown University.
32. August 2002. IMS/ASA/SIAM Summer Research Conference, Mt. Holyoke College.
33. August 2002. Joint Statistical Meetings, New York, NY.
34. October 2002. Department of Statistics, Harvard University.
35. November 2002. Center for Clinical Epidemiology and Biostatistics, University of Pennsylvania.

36. March 2003. Serono Symposium on Frontiers in Reproductive Endocrinology, Savannah.
37. August 2003. Joint Statistical Meetings, San Francisco.
38. December 2003. Department of Biostatistics, Harvard School of Public Health.
39. February 2004. Center for Health Quality, Outcomes & Economic Research, Bedford MA.
40. May 2004. NICHD National Children's Study Workshop on Expanding Methodologies for Capturing Day-Specific Probability of Conception. Rockville MD.
41. June 2004. Epidemiology Branch, Division of HIV Prevention, CDC, Atlanta.
42. June 2004. International Society for Quality of Life Research Symposium on Advancing Outcomes Research Methodology, Boston.
43. February 2005. Division of Biostatistics, UC San Diego.
44. March 2005. Serono Symposium on Frontiers in Reproductive Endocrinology, Washington.
45. April 2005. Workshop on Biomarkers in HIV and Cancer, Mathematical Biosciences Institute, Department of Mathematics, Ohio State University.
46. April 2005. Department of Statistics, UC Irvine.
47. April 2005. Department of Epidemiology and Biostatistics, UC San Francisco.
48. May 2005. Annual Meeting of the Society of Clinical Trials, Portland OR.
49. June 2005. Annual Meeting of Academy Health, Boston.
50. August 2005. Joint Statistical Meetings, Minneapolis.
51. December 2005. Exposure/Response Best Practices Conference, Drug Information Agency, Philadelphia.
52. February 2006. Department of Biostatistics, University of Pennsylvania.
53. April 2006. Department of Biostatistics, Yale University.
54. June 2006. International Chinese Statistical Association Annual Symposium, University of Connecticut.
55. August 2006. Joint Statistical Meetings, Seattle.
56. December 2006. Department of Biostatistics, Vanderbilt University.
57. December 2006. Statistical Research and Consulting Center, Pfizer Inc., New London.
58. March 2007. ENAR Spring Meetings, Atlanta.
59. March 2007. Serono Symposium on Frontiers in Reproductive Endocrinology, Washington.
60. April 2007. Lead discussant for read paper session, Royal Statistical Society, London.
61. August 2007. Joint Statistical Meetings, Salt Lake City.
62. September 2007. Department of Mathematics, University of Connecticut.
63. September 2007. Biostatistics Branch, NIAID, Washington.
64. January 2008. Department of Epidemiology, Johns Hopkins University.
65. May 2008 (discussant). Mid Atlantic Conference on Causal Inference, Johns Hopkins University.
66. August 2008 (panelist). Joint Statistical Meetings, Denver.
67. October 2008. Department of Biostatistics, Indiana University School of Medicine.
68. October 2008. Department of Biostatistics, University of Texas MD Anderson Cancer Center.
69. January 2009. Informative priors for handling missing data. Bayesian Biostatistics Conference, Division of Quantitative Sciences, UT MD Anderson Cancer Center.

70. February 2009. Informative priors for handling missing data. Division of Biostatistics, Albert Einstein College of Medicine, Bronx NY.
71. March 2009. ENAR Spring Meetings, San Antonio.
72. April 2009. Informative priors for handling missing data. Department of Biostatistics, Harvard School of Public Health
73. August 2009. Semiparametric estimation of causal mediation effects. Joint Statistical Meetings, Washington DC.
74. December 2009. Semiparametric estimation of causal mediation effects. Division of Biostatistics, University of Pennsylvania.
75. December 2009. Principal stratification and complier-averaged causal effects. Criminal Justice – Drug Abuse Treatment Studies (CJ-DATS) Network. Phoenix, AZ.
76. January – March 2010. Modern Biostatistical Methods for Clinical Research (4 lectures). Moi University School of Medicine, Eldoret, Kenya.
77. February 2010. Biostatistical Methods and AMPATH Research. Kenya Medical Research Institute (KEMRI), Kisumu, Kenya.
78. June 2010. Survival Analysis. Department of Mathematics and Computer Science, Moi University Science Campus, Chepkoilel, Kenya.
79. June 2010. Biostatistical Methods and AMPATH Research. Department of Statistics, Purdue University.
80. June 2010. Handling Missing Data in Longitudinal Studies (invited workshop). AcademyHealth Annual Meetings, Boston.
81. August 2010. Bounds on average treatment effect and unmeasured confounding bias in observational studies with continuous outcome. Joint Statistical Meetings, Vancouver.
82. March 2011. Statistical methods for evaluation of nutrition supplementation for HIV-infected individuals receiving antiviral therapy. International Biometric Society / ENAR Annual Meetings, Miami.
83. April 2011. Causal inference for censored event times, with application to treatment of HIV/TB coinfection in western Kenya. Department of Biostatistics, Harvard School of Public Health.
84. April 2011. Optimizing diagnosis of HIV first line treatment failure with selective use of viral load testing in resource limited settings. Workshop on Statistical Methods in HIV Research, Centre de Recherches de Mathématiques, Université de Montréal.
85. May 2011. Imputation-based inference for natural direct and indirect effects. Conference on Causal Inference in Health Research, Centre de Recherches de Mathématiques, Université de Montréal.
86. May 2011. Causal inference for survival times and current events with censored exposure. Workshop on Analysis of Survival and Event History Data, Centre de Recherches de Mathématiques and Fields Institute, Université de Montréal.
87. October 2011. Sensitivity analysis for incomplete data in clinical trials. International Conference on Health Policy Statistics, American Statistical Association, Cleveland.
88. November 2011. Sensitivity analysis in clinical trials. Biopharmaceutical Applied Statistics Symposium 18<sup>th</sup> Annual Conference, Savannah.
89. January 2012. Causal mediation analysis with multiple mediators. Winter Workshop, University of Florida.

90. February 2012. Imputation-based inference for natural direct and indirect effects. Statistics and Probability Seminar, Department of Mathematics and Statistics, University of Massachusetts, Amherst.
91. March 2012. Causal mediation analysis with multiple mediators. International Biometric Society / ENAR Annual Meetings, Washington DC.
92. December 2012. Sensitivity analysis for longitudinal clinical trials with dropout. American Society for Quality Deming Conference on Applied Statistics, Atlantic City.
93. February 2013. Symposium on Quantitative Methods for Implementation Science & Translational Research (invited discussant). Harvard School of Public Health.
94. March 2013. Methods for mediation analysis in alcohol intervention studies. International Biometric Society / ENAR Annual Meetings, Orlando.
95. March 2013. Optimal allocation of gold standard testing under constrained availability: HIV treatment monitoring for resource limited settings. Department of Statistics, Wharton School, University of Pennsylvania.
96. April 2013. Optimal allocation of viral load testing for monitoring first line therapy in resource constrained settings (invited poster). 17th International Workshop on HIV Observational Databases, Cavtat, Croatia.
97. August 2013. Bayesian inference with unmeasured confounding. Joint Statistics Meetings, Montreal.
98. November 2013. Optimal allocation of gold standard testing under constrained availability: HIV treatment monitoring for resource limited settings. Department of Biostatistics, Emory University School of Public Health.
99. October 2014. Bayesian inference and sensitivity analysis with missing data. ASA Biopharmaceutical Section FDA-Industry Statistics Workshop, Washington DC.
100. October 2014. Data science training and capacity building in sub-Saharan Africa. Meeting on CFAR HIV Research in International Settings (CHRIS), San Diego.
101. December 2014. HIV treatment monitoring for resource limited settings: data-driven methods to optimize utility of viral load testing. Biostatistics Research Branch, NIAID, Washington DC.
102. February 2015. Antiviral therapy for HIV-infected children in Kenya: Statistical methods for estimating effect and informing guidelines. Biostatistics and Bioinformatics Branch, NICHD, Washington DC.
103. March 2015. Representations of unmeasured confounding and implications for sensitivity analysis. ENAR Spring Meetings, Miami.
104. March 2015. Data-driven nonlinear models for causal effect of cART on growth parameter dynamics in HIV-infected children. Invited poster, International Workshop on HIV Observational Databases (IWHOD), Catania, Italy.
105. May 2015. The role of biostatistics and data science in improving care, treatment and outcomes in resource-constrained settings. CFAR Grand Rounds, Perelman School of Medicine, University of Pennsylvania.
106. May 2015. Bayesian inference with unmeasured confounding. Department of Biostatistics and Epidemiology, Perelman School of Medicine, University of Pennsylvania.
107. May 2015. Representations of unmeasured confounding and implications for sensitivity analysis. Atlantic Causal Inference Conference, Wharton School, University of Pennsylvania.
108. July 2015. Causal inference with multiple mediators. 60<sup>th</sup> World Statistics Congress, Rio de Janeiro, Brazil.

109. September 2015. Data-driven decision making for HIV treatment monitoring under resource constraints. Population Studies Training Center, Brown University.
110. October 2015. Representation of unmeasured confounding in observational studies. International Conference for Health Policy Research, Providence RI.
111. November 2015. State-space models for the HIV treatment cascade. NIH Workshop on Infectious Disease Research: Quantitative Methods and Models in the Era of Big Data. Bethesda, MD.
112. February 2016. Sensitivity analysis for unmeasured confounding: formulation, implementation, interpretation. Causal Inference Methods for Patient Outcomes Data (CIMPOD), Washington DC.
113. February 2016. Principal stratification and instrumental variables for estimating complier-average causal effects. Causal Inference Methods for Patient Outcomes Data (CIMPOD), Washington DC.
114. March 2016. Bayesian inference with unmeasured confounding. ENAR Spring Meetings, Austin TX.
115. June 2016. Using Electronic Health Records Data for Causal Inferences about the HIV Care Cascade. Committee on Applied and Theoretical Statistics. National Academies of Science, Washington DC.
116. August 2016. Assessing Causal Impacts of Policy in the HIV Care Cascade. Joint Statistical Meetings, Chicago.
117. October 2016. Assessing Causal Impacts of Policy in the HIV Care Cascade. Dalla Lana School of Public Health, University of Toronto.
118. March 2017. Using Electronic Health Records Data for Causal Inferences about the HIV Care Cascade. ENAR Spring Meetings, Washington DC.
119. March 2017. Effect of 'Treat Immediately' on HIV Care and Engagement in CFAR Network of Integrated Clinical Systems. International Workshop on HIV Observational Databases, Lisbon.
120. May 2017. Statistical Models for the HIV Care Cascade. Division of Population Health Research 50<sup>th</sup> Anniversary Conference, NICHD, Bethesda MD.
121. May 2017. The Perils and Promise of Electronic Health Records Data. International Biometric Society – Eastern Mediterranean Region Biannual Conference, Thessaloniki Greece.
122. September 2017. The Perils and Promise of Electronic Health Records Data. Grand Rounds in the Department of Population Health, NYU School of Medicine.
123. November 2017. Statistical Methods for Improving HIV Treatment Monitoring in Kenya. Statistics and Data Science Seminar, Amherst College.
124. May 2018. Statistical Models for the HIV Care Cascade. Department of Biostatistics Colloquium Series, Harvard School of Public Health.
125. July 2018. Using Electronic Health Records Data for Causal and Predictive Inference about the HIV Care Cascade. Joint Statistical Meetings, Vancouver.
126. October 2018. Using Electronic Health Records Data for Causal and Predictive Inference about the HIV Care Cascade. Department of Biostatistics, Indiana University.
127. October 2018. Using Electronic Health Records Data for Causal and Predictive Inference about the HIV Care Cascade. Department of Biostatistics and Epidemiology, University of Massachusetts School of Public Health, Amherst.
128. October 2018. Workshop on Methods for Handling Missing Data. MD EpiNet Annual Conference, Silver Spring MD.

129. March 2019. Building a US-Kenya Partnership for Biostatistics Training and Research. ENAR Spring Meetings, 2019
130. April 2019 (Keynote). Statistical Methods for Improving and Evaluating HIV Treatment Outcomes using Electronic Health Records. [Symposium on Innovations in Design, Analysis and Dissemination: Frontiers in Biomedical Data Science](#). University of Kansas Medical Center.
131. May 2019. Using Electronic Health Records Data for Causal and Predictive Inference about the HIV Care Cascade. [CIRA Cross-Core Seminar, Yale University](#).
132. June 2019. Using Electronic Health Records Data for Causal and Predictive Inference about the HIV Care Cascade. [Bayesian Causal Inference Workshop, Mathematical Biosciences Institute](#), Ohio State University.
133. October 2019. Using Electronic Health Records Data for Causal and Predictive Inference about the HIV Care Cascade. [Interdisciplinary Dean's Speaker Series in Data Science \(Inaugural Lecture\)](#), Binghamton University.
134. February 2020. Using Electronic Health Records Data for Causal and Predictive Inference about the HIV Care Cascade. [University of South Carolina National Big Data Health Science Conference \(Plenary Speaker\)](#), Columbia SC
135. August 2020. [Bayesian Mediation Analysis for Cluster Randomized Trials](#). Joint Statistical Meetings Virtual Conference.
136. October 2020. Bayesian Causal Inference for the HIV Care Cascade. Department of Biostatistics, University of Michigan.
137. October 2020. What's in a Model? [Lagakos Distinguished Alumni Award Lecture](#), Department of Biostatistics, Harvard University.
138. April 2021. Bayesian Causal Inference for the HIV Care Cascade. Department of Statistics, Penn State University.
139. June 2021. Discussant, ["Recent Advances in Causal Mediation Analysis"](#). 4<sup>th</sup> International Conference on Econometrics and Statistics (EcoSta), Hong Kong University of Science and Technology (virtual).

## SHORT COURSES

1. February 1998. 'Analyzing Repeated Measures Data from Longitudinal Clinical Trials,' Acer-Excel Inc., Cranford NJ.
2. September 1998. 'Methods and Concepts in Biostatistics,' Clinical Epidemiology and Evidence-Based Medicine Conference, Women & Infants' Hospital and Brown University School of Medicine, Providence.
3. May 1999. 'Handling Dropout in Longitudinal Clinical Trials.' Eli Lilly Inc., Indianapolis.
4. July 2000 and July 2001. 'Analyzing Longitudinal Data.' 20th Annual Epidemiology Summer Program (sponsored by Epidemiology Research Institute, Tufts University and Boston University).
5. March 2001. 'Statistical Methods for Handling Missing Data in Longitudinal Studies.' Society of Behavioral Medicine Annual Meetings, Seattle.
6. December 2001. 'Modeling Longitudinal Data' (joint with Jason Roy), International Conference on Health Policy Research, Boston.
7. Hogan JW (2002). Data Analytic Challenges In In-vitro Fertilization and Assisted Reproductive Technologies. (Serono Symposium Web-Based Course RHI0802).

8. February 2004. 'Mediators and Moderators in Behavioral Medicine: Review, Application and Appraisal of Statistical Methodology.' Pittsburgh Mind-Body Center, University of Pittsburgh and Carnegie Mellon University.
9. August 2007. 'Missing Data in Longitudinal Studies' (joint with Mike Daniels). Joint Statistical Meetings, Salt Lake City.
10. August 2007. 'Missing Data in Longitudinal Studies' (joint with Mike Daniels). Centers for Disease Control, Atlanta.
11. December 2007. 'Missing Data in Longitudinal Studies' (joint with Mike Daniels). 63rd Annual Deming Conference on Applied Statistics, Atlantic City.
12. March 2008. 'Missing Data in Longitudinal Studies' (joint with Mike Daniels). ENAR Spring Meetings, Washington DC.
13. August 2009. 'Missing Data in Longitudinal Studies' (joint with Mike Daniels). Joint Statistical Meetings, Washington DC.
14. December 2011. 'Practical Statistical Methods for Longitudinal and Missing Data'. Initiative for Population Research, Ohio State University.
15. March 2012. 'Methods for Missing Data and Sensitivity Analysis' (joint with Dan Scharfstein). International Biometric Society / ENAR Annual Meetings, Washington DC.
16. August 2013. 'Analysis of Longitudinal Data and Missing Data (joint with Ann Mwangi). Moi University School of Medicine / AMPATH, Eldoret, Kenya (one week course).
17. June 2014. 'Causal Inference and Missing Data in Health Research' (with Ann Mwangi). Moi University School of Medicine / AMPATH, Eldoret, Kenya (one week course). [\[WEBSITE\]](#)
18. September 2016. 'Case Studies in Causal Inference for HIV and Biomedical Research' (with Ann Mwangi). Moi University School of Medicine / AMPATH, Eldoret, Kenya (one week course). [\[WEBSITE\]](#)
19. July 2019. 'Multilevel Models and Cluster Randomized Trials'. Moi University School of Medicine / AMPATH, Eldoret, Kenya.

**RESEARCH GRANTS AND CONTRACTS : ACTIVE****Statistical methods***Optimizing HIV Treatment Monitoring under Resource Constraints*

Role: MPI (co-PI Rami Kantor, Brown U)  
 Agency: NIH/NIAID (R01 AI108441)  
 Period: 12/01/14 – 10/31/21 NCE  
 Amount: \$1,869,552 (TC)

**Training Grant***Moi-Brown Partnership for HIV Biostatistics Training*

Role: Program Director  
 Agency: NIH/FIC (D43 TW010050)  
 Period: 06/24/15 – 05/31/21 NCE  
 Amount: \$1,491,292 (TC)

**Interdisciplinary Collaborations***Orphaned & Separated Children's Assessment Related to their Health & Well-Being*

Role: Co-investigator (subcontract PI)  
 PI: Paula Braitstein, PhD, Indiana University  
 Agency: NIH/NICHHD (R01 HD060478)  
 Period: 6/01/15 – 05/31/21 NCE  
 Amount: \$759,950 (TC)

*Providence-Boston Center for AIDS Research (Biostatistics Core)*

Role: Co-Director of Biostatistics Core (subcontract PI)  
 PI: Susan Cu-Uvin, Brown University & Miriam Hospital  
 Agency: NIH/NIAID (P30 AI 42853)  
 Period: 09/01/98 – 06/30/23  
 Amount: \$701,085 (TC)

*Bridging Income Generation with Group Integrated Care (BIGPIC)*

Role: Co-investigator (subcontract PI)  
 PI: Rajesh Vedanthan, MD, Icahn School of Medicine at Mt Sinai  
 Agency: NIH/NHLBI (R01 HL125487)  
 Period: 04/01/15 – 01/31/21 NCE  
 Amount: \$450,849 (TC)

*HIV treatment failure and drug resistance in western Kenyan children*

Role: Co-investigator (subcontract PI)  
 PI: Rachel Vreeman, MD, Icahn School of Medicine at Mt Sinai  
 Agency: NIH/NIAID (R01 AI120792)  
 Period: 08/02/16 – 07/31/21 NCE  
 Amount: \$332,101 (TC)

*Real Time Phylogeny and Contact Tracing to Disrupt HIV Transmission*

Role: Co-investigator (subcontract PI)  
 PI: Rami Kantor MD, The Miriam Hospital  
 Agency: NIH/NIAID (R01 AI36058)  
 Period: 03/05/18 – 02/28/23  
 Amount: \$712,740 (TC)

*Addressing HIV drug resistance research gaps in a cohort of perinatally infected Kenyan children and adolescents*

Role: Co-investigator (subcontract PI)  
 PI: Rami Kantor MD, The Miriam Hospital  
 Agency: NIH/NIAID (R01 AI147333)  
 Period: 06/27/19 – 05/31/24  
 Amount: \$526,086 (TC)

*Harambee: Integrated Community-Based HIV/NCD Care & Microfinance Groups in Kenya*

Role: Co-investigator  
 PI: Omar Galarraga, PhD, Brown University  
 Agency: NIH/NIMH (R01 MH118075)  
 Period: 07/05/19 – 04/30/24  
 Amount: \$2,756,028 (TC)

*Reducing Drug-Related Mortality Using Predictive Analytics: A Randomized, Statewide, Community Intervention Trial*

Role: Co-investigator  
 PI: Brandon Marshall, PhD, Brown University  
 Agency: NIH/NIDA (R01 DA046620)  
 Period: 09/30/19 – 07/31/24  
 Amount: \$3,267,708 (TC)

*A Learning healthcare System in Rhode Island for COVID-19*

Role: Co-investigator  
 PI: Elizabeth Chen, PhD, Brown University  
 Agency: Brown SEED Funds  
 Period: 05/15/20 – 05/14/21  
 Amount: \$14,500 (TC)

*The role of resilience in addressing racial disparities in adverse HIV-related outcomes*

Role: Co-investigator  
 PI: MPI Chanelle Howe, PhD, Brown University  
       Akilah Dulin-Keita, PhD, Brown University  
 Agency: NIH (R01 MH112386)  
 Period: 08/25/17 – 05/31/22  
 Amount: \$3,581,325 (TC)

*Assistantship and Faculty Service - CARES ACT*

Role: Contractor (Analytics for COVID-19 Response in Rhode Island)  
 Agency: Rhode Island Department of Health  
 Period: 05/19/20 – 12/18/20  
 Amount: \$186,876 (TC)

*Flexible Bayesian approaches to causal inference with multilevel survival data and multiple treatments with applications to high-risk prostate cancer*

Role: Co-investigator (subcontract PI)  
 PI: Liangyuan Hu, PhD, Icahn School of Medicine at Mt Sinai  
 Agency: NIH (R21 CA245855)  
 Period: 07/16/20 – 06/30/22  
 Amount: \$89,704 (TC)

*Impact of COVID-19 on Adolescents Living with HIV in Kenya*

Role: Co-investigator (subcontract PI)  
 PI: MPI Rami Kantor MD, The Miriam Hospital  
 Rachel Vreeman, MD, Icahn School of Medicine at Mt Sinai  
 Agency: NIH  
 Period: 07/01/20 – 06/30/21  
 Amount: \$31,643 (TC)

**RESEARCH GRANTS AND CONTRACTS: COMPLETED**

**Statistical Methods**

*Training and Teaching for Transforming Big Data to Knowledge*

Role: Co-investigator  
 PI: Neil Sarkar, PhD, Brown University  
 Agency: NIH/NIMH (R25 MH116440)  
 Period: 10/01/17 – 08/31/20  
 Amount: \$319,798 (TC)

*Foundations of Model Driven Discovery from Massive Data*

Role: Co-investigator  
 PI: Jeffrey Brock, PhD, Brown University  
 Agency: NSF  
 Period: 09/01/17 – 08/31/22 (NCE)  
 Amount: \$1,482,177 (TC)

*AMPATH Oncology Institute*

Role: Director of Biostatistics and Data Management Core  
 PI: Patrick Loehrer MD, Indiana University School of Medicine  
 Agency: NIH/NCI (U54 CA190151-8244)  
 Period: 09/14/14 – 08/31/20 NCE  
 Amount: \$194,728 (TC)

*Alcohol and HIV: Biobehavioral Interactions and Intervention (Biostatistics Core)*

Role: Co-Investigator (Director, Biostatistics Core, 9/30/10 – 6/30/16)  
 PI: Peter Monti, PhD, Brown University  
 Agency: NIH/NIAAA (P01 AA 019072)  
 Period: 9/30/10 – 5/31/20  
 Amount: \$6,506,689 (TC)

*New Approaches to Mediation Analysis Using Causal Inference Methods*

Role: Principal Investigator  
 Agency: NIH/NIAAA (RC1 AA 019186)  
 Period: 09/30/09 – 02/28/13  
 Amount: \$481,042

*Regression Methods for Infertility Data*

Role: Principal Investigator  
 Agency: NIH/NICHHD (R03 HD 35996)  
 Period: 02/01/98 - 01/31/00  
 Amount: \$149,888

*Analyzing Multiple Process Data in HIV & AIDS*

Role: Principal Investigator  
 Agency: NIH/NIAID (R01-AI-50505)  
 Period: 09/01/01 - 06/30/05  
 Amount: \$891,639

*Analyzing Complex Longitudinal Data in Behavior Sciences*

Role: Principal Investigator  
 Agency: NIH/NHLBI (R01-HL-79457)  
 Period: 08/01/04 – 07/31/08  
 Amount: \$770,312

*Implementation of Causal Modeling Technology to Assess and Improve the Effects of Antiviral Therapy in Children*

Role: PI of administrative supplement to parent grant  
 PI: Kara Wools Kaloustian, Indiana University  
 Agency: NIH/NIAID (U01 AI069911)  
 Period: 08/01/14 – 07/31/16 (no cost continuation)  
 Amount: \$75,000

*Bayesian Approaches for Missingness and Causality in Cancer and Behavior Studies*

Role: Co-I (PI of subcontract)  
 PI: Michael Daniels, University of Texas  
 Agency: NIH/NCI (R01 CA183854)  
 Period: 03/01/13 – 02/28/18  
 Amount: \$338,824

**Interdisciplinary collaborations***Optimizing Linkage and Retention to Hypertension Care in Rural Kenya*

Role: Co-investigator (subcontract PI)  
 PI: Valentin Fuster, MD, Icahn School of Medicine at Mt Sinai  
 Agency: NIH/NHLBI (U01 HL 114200)  
 Period: 4/1/13 – 3/31/17  
 Amount: \$177,854

*AMPATH Plus*

Role: Co-Director, AMPATH Biostatistics Program (subcontract PI)

PI: Robert Einterz, MD, Indiana University  
 Agency: USAID (623-A-00-0-08-00003-00)  
 Period: 10/01/08 – 09/30/17  
 Amount: \$283,943

*A Stage-2 Cognitive-Behavioral Trial: Reduce Alcohol First in Kenya Intervention*

Role: Co-investigator (subcontract PI)  
 PI: Rebecca Papas, PhD, Brown University  
 Agency: NIH/NIAAA (R01 AA 020805)  
 Period: 09/01/11 – 08/31/17  
 Amount:

*COBRE Center for Central Nervous System Function*

Role: Design and Analysis Core PI  
 PI: Jerome Sanes, Brown University  
 Agency: NIGMS (P20 GM 103645)  
 Period: 8/15/13 – 6/30/15  
 Amount: \$1,774,947

*Improving Linkage to HIV Care Following Release from Incarceration (LINCS)*

Role: Co-investigator (subcontract PI)  
 PI: Josiah Rich, MD, Brown University / Miriam Hospital  
 Agency: NIH/NIDA (R01 DA 030778)  
 Period: 11/01/12 – 06/30/15  
 Amount: \$792,187

*ASANTE Cardiovascular Pulmonary Disease Center of Excellence*

Role: Co-Investigator (subcontract PI)  
 PI: Sylvester Kimaiyo, MD, Moi University School of Medicine, Eldoret, Kenya  
 Agency: NHLBI/NIH (N01-HV-98221)  
 Period: 07/01/09 – 06/30/14  
 Amount: \$622,372

*HIV-1 Drug Resistance in Different Subtypes*

Role: Co-investigator (subcontract PI)  
 PI: Rami Kantor, MD, Brown University/Miriam Hospital  
 Agency: NIH/NIAID (R01 AI 066922)  
 Period: 09/01/08 – 08/31/14  
 Amount: \$353,869

*Neuromarkers of Age-Related Cognitive Decline*

Role: Co-Investigator (subcontract PI)  
 PI: Robert Paul, MD, University of Missouri – St. Louis  
 Agency: NIH/NINDS (R01 NS 052470)  
 Period: 07/01/07 – 06/30/14  
 Amount: \$291,995

*Age Effects on the HIV-associated Brain Dysfunction*

Role: Co-investigator (subcontract PI)  
 PI: Ronald Cohen, M.D., Brown University & Miriam Hospital

Agency: NIH  
 Period: 09/30/06 – 08/31/11  
 Amount: \$126,295

*YMCA Exercise Program to Enhance Nicotine Dependence Treatment for Women*

Role: Co-investigator (subcontract PI)  
 PI: Bess Marcus, Ph.D., Brown University & Miriam Hospital  
 Agency: NIH/NIDA (R01- DA021729)  
 Period: 09/29/06 – 04/30/10  
 Amount: \$226,933

*Criminal Justice / Drug Abuse Treatment Studies (CJ-DATS)*

Role: Consulting Statistician (subcontract PI)  
 PI: Peter Friedmann, M.D., Brown University & RI Hospital  
 Agency: NIH/NIDA (U01-DA-16191)  
 Period: 09/01/06 – 08/31/08  
 Amount: \$59,604

*Antiviral Therapy and HIV in the Genital Tract of Women*

Role: Co-investigator (subcontract PI)  
 PI: Susan Cu-Uvin, M.D., Brown University & Miriam Hospital  
 Agency: NIH/NIAID (R01-AI 40350)  
 Period: 05/01/03- 04/30/09  
 Amount: \$176,501

*Modifying the Obesogenic Home Environment: Impact on Weight Loss*

Role: Co-investigator (subcontract PI)  
 PI: Amy Gorin, Ph.D., Brown University & Miriam Hospital  
 Agency: NIH/NIAID (R01 HL 077082-01)  
 Period: 05/01/04 – 04/30/08  
 Amount: \$96,470

*Epidemiological Research Studies of AIDS and HIV Infection (HERS)*

Role: Co-investigator (subcontract PI)  
 PI: Charles C. J. Carpenter, M.D., Brown University  
 Agency: CDCP (U64 CCU10675)  
 Period: 10/01/96 - 05/31/01  
 Amount: \$238,404

*The Demography of Child Disability and Rehabilitation*

Role: Co-investigator  
 PI: Dennis Hogan, Ph.D., Brown University  
 Agency: NIH/NICHHD (R03 HD 35376-02)  
 Period: 09/01/97 - 08/31/99

*Race and the Parental Roles of Men and Women, 1880-1990*

Role: Co-investigator  
 PI: Frances Goldscheider, Ph.D., Brown University  
 Agency: NIH/NICHHD (R01 HD 35527-01A1)  
 Period: 07/01/98 - 06/30/00

*Stage-Matched Intervention to Increase Dual Method Use*

Role: Co-investigator (subcontract PI)  
 PI: Jeffrey Peipert, M.D., Brown University and WIH  
 Agency: NIH/NICHD (R01-HD-36663)  
 Period: 10/01/98 - 07/31/99  
 Amount: \$12,885

*Area-Based Socioeconomic Measures for Health Data*

Role: Co-investigator  
 Brown PI: Sally Zierler, Ph.D., Brown University  
 PI: Nancy Krieger, Ph.D., Harvard University  
 Agency: NIH (R01 HD 36865)  
 Period: 12/01/98 - 02/28/01

*Moderate Exercise to Aid Smoking Cessation in Women*

Role: Protocol Statistician & Co-investigator (subcontract PI)  
 PI: Bess Marcus, Ph.D., Brown University & Miriam Hospital  
 Agency: NIH/NCI (R01 CA 77249)  
 Period: 1998 - 2001  
 Amount: \$115,073

*Epidemiology of Ovarian Function in Relation to Violence*

Role: Co-investigator  
 PI: Sally Zierler, Ph.D., Brown University  
 Agency: NIH (R01 MH 57735)  
 Period: 07/01/99 - 06/30/00

*Child Disability and the Family*

Role: Co-investigator  
 PI: Dennis Hogan, Ph.D., Brown University  
 Agency: NIH (U01 HD 37614)  
 Period: 07/01/99 - 06/30/04

*Contextual Model of Microbicide Acceptability*

Role: Co-investigator (subcontract PI)  
 PI: Kathleen Morrow, Ph.D., Brown University & Miriam Hospital  
 Agency: NIH/NIMH (R01 MH 64455)  
 Period: 09/01/01 - 08/31/03  
 Amount: \$24,801

*Immigration and Early Life Course Transitions*

Role: Co-investigator  
 PI: Jennifer Glick, Ph.D., Arizona State University  
 Brown PI: Michael White, Ph.D., Brown University  
 Agency: NIH/Subcontract with Arizona State University (R01 HD 37054)  
 Period: Completed 08/31/04

*Directly Observed HAART for Substance Abusers*

Role: Co-investigator (subcontract PI 2004-05)

PI: Timothy Flanigan, M.D., Brown University & Miriam Hospital  
Agency: NIH (R01-DA-13767)  
Period: 01/01/01 - 08/31/05  
Amount: \$57,150

*Internet Technologies to Increase Exercise Behavior*

Role: Co-investigator (subcontract PI)  
PI: Bess Marcus, Ph.D., Brown University  
Agency: NIH/NHLBI (R01 HL 069866)  
Period: 01/20/03 - 12/31/06  
Amount: \$149,640

*Enhanced Internet Behavior Therapy for Obesity Treatment*

Role: Co-investigator (subcontract PI)  
PI: Deborah Tate, Ph.D., University of North Carolina  
Agency: NIH (R01 DK 60058)  
Period: 09/30/02 - 05/31/07  
Amount: \$139,224

## SERVICE ACTIVITIES

### A. University Service

#### University Level

- 1999 – 2000 **Discussion Leader**, Points on the Compass (Orientation for first-year students)
- 2000 – 2003 **Faculty Committee on the Academic Code**
- 2001 – 2003 **Faculty Committee on Minority Faculty Recruitment**
- 2001 **Provost Search Committee**
- 2002 – 2006 **Steering Committee**, Initiative on Spatial Structures in the Social Sciences (S4)
- 2006 **Review Committee**, Smith Family Foundation New Investigator Award Program
- 2006 – 07 **Committee to Review Policies and Procedures for Tenure & Promotion**, Division of Biology & Medicine
- 2007 – 08 **University Graduate Council**
- 2007 – 10 **Research Advisory Board**, Office of Vice President for Research (OVPR)
- 2009, 2011 **Academic Priorities Committee**, Office of the Provost (elected)
- 2009 **Conflict of Interest Review Board**, OVPR
- 2013 **Salomon Grant Review Committee**, OVPR
- 2013 – 14 **Proposal Development Team**, 'Building on Distinction: A New Plan for Brown'
- 2013 – 16 **Tenure, Promotions and Appointments Committee** (elected)
- 2015 **Rapid Planning Group for Data Science Initiatives**, Office of the Provost
- 2015 **Data Cores Task Force**, OVPR

#### Department, Division and School Level

- 1997 – 1999 **Steering Committee**, George W. Anderson Outcomes Research Unit, Department of Ob/Gyn and Women & Infants' Hospital.
- 1998 – 2008 **Research Faculty Search Committees (5)**, Department of Community Health
- 1999 – 2008 **Curriculum Committee**, Department of Community Health
- 2002 – 2003 **Undergraduate Curriculum Working Group**, Dept. of Community Health
- 2002 – 2006 **Steering Committee**, Initiative on Spatial Structures in the Social Sciences (S4)
- 2004 – 08 **Junior Faculty Search Committees in Biostatistics**, Dept of Community Health. (Chair 2005-06)
- 2005 – 08 **Senior Faculty Search Committees in Biostatistics**, Dept of Community Health
- 2005 – 06 **Senior Faculty Search for Behavioral & Social Sciences**, Dept Comm. Health
- 2007 **Frank Fellowship Review Committee**, Division of Biology & Medicine
- 2007 **Public Health Program Strategic Planning Committee**
- 2007 – 09 **Faculty Search Committees in Epidemiology**, Dept of Comm Health
- 2009 – 10 **Faculty Search Committee in Biostatistics** (Co-Chair)
- 2010 – 11 **Faculty Search Committee in Biostatistics**
- 2010 – 11 **Faculty Search Committee in Epidemiology**
- 2010 – 11 **Search Committee for Chair**, Department of Behavioral and Social Sciences
- 2011 – 13 **Faculty Search Committees in Biostatistics** (Chair for junior searches)

2013 – 14	<b>Strategic Planning Committee</b> , School of Public Health
2014 - 15	<b>Search Committee for Chair</b> , Department of Epidemiology
2014 – 15	<b>Chair, Search Committee for Teaching Scholar Track</b> , Dept of Biostatistics
2015	<b>Ad-hoc Committee on PhD Funding and Planning</b> , School of Public Health
2016	<b>Chair, Search Committee</b> , Tenure Track Faculty in Biostatistics
2018	<b>Search Committee</b> , Tenure Track Faculty for Data Science Initiative
2019 – pres.	<b>Ad-hoc Committee on Health Data Science (Chair)</b> , School of Public Health
2019 – pres.	<b>Academic Priorities Committee</b> , Department of Biostatistics, SPH
2020	<b>Search Committee (Chair)</b> , Teaching Scholar Faculty Search, Dept of Biostatistics
2020 – 21	<b>Search Committee</b> , Tenure Track Faculty, Dept of Biostatistics

### Seminars and Working Groups

1995 – 1996	<b>Organizer</b> , Statistics Seminar, Center for Statistical Sciences
1998 – 1999	<b>Organizer</b> , University Lecture Series: ‘Meta Analysis in Medical Research’
1999 – 2000	<b>Co-organizer</b> , Department of Community Health Seminar
2002 – 2003	<b>Organizer</b> , University Lecture Series: ‘Analysis of Spatially Aligned Data’
2003 – 2004	<b>Organizer</b> , University Lecture Series: ‘Statistical Methods for Bioinformatics’
2005 – 2006	<b>Co-organizer</b> , Bioinformatics Working Group, Center for Statistical Sciences
2014	<b>Organizer</b> , Data Science Working Group in HIV, Brown CFAR
2018	<b>Organizer</b> , Working Group on Statistical and Mathematical Modeling, Brown SPH
2020	<b>Organizer</b> , ‘Decoding Pandemic Data’ Interactive Seminar Series, Brown DSI
2020	<b>Organizer</b> , Cross-disciplinary Causal Inference Working Group, Brown DSI

### B. Professional & Government Service

#### Review and Advisory Panels

1998	<b>Reviewer</b> . Division of Mathematics and Statistics, NSF
1998	<b>Consultant</b> . Antiviral Drugs Advisory Committee, FDA
2000 – 07	<b>Clinical Trials Advisory Board</b> , NIH Reproductive Medicine Network
2000 – 02	<b>Reviewer (ad hoc)</b> . NIH Study Section, Statistical Methods (SNEM-5)
2003	<b>Chair</b> . NIH Special Emphasis Panel, ‘Measurement and Statistical Analysis in Mental Health Research.’
2003	<b>Reviewer (ad hoc)</b> . NIH Study Section, Behavioral Genetics & Epidemiology
2004	<b>Chair</b> . NIH Special Emphasis Panel, ‘Statistical Methods for Longitudinal Studies.’
2004	<b>Reviewer</b> . NIH Special Emphasis Panel, ‘Behavior and Social Science Methods’
2005	<b>Reviewer (ad hoc)</b> . NIH Study Section, AIDS Epidemiology (ACE)
2005 – 07	<b>Reviewer (ad hoc)</b> . NIH Study Section, Biostatistical Methods (BMRD)
2006	<b>Reviewer (ad hoc)</b> . NIH Study Section, Mental Health Services (SRV)
2005 – 10	<b>Scientific Advisory Board</b> , HIV Neurobehavioral Research Ctr, UC San Diego
2005 – 06	<b>Committee Member</b> . ‘Asbestos – Selected Health Effects’, Institute of Medicine, National Academies of Science

- 2006 – 2011 **External Advisory Committee**, CNS HIV Anti-Retroviral Therapy Effects Research (CHARTER) Study, UC San Diego
- 2007 **Natural History and Epidemiology Planning Group for FY 2009**, NIH Office of AIDS Research
- 2007 – 11 **NIH Study Section Member**, Biostatistical Methods & Research Design (BMRD)
- 2009 **Co-Organizer**, Symposium on Building Biostatistics Capacity in Sub-Saharan Africa, NIAID, Bethesda MD.
- 2009 – 10 **Committee for Handling Missing Data in Clinical Trials**, National Research Council, National Academies of Science
- 2012 **Reviewer**. Special Emphasis Panel on HIV Vaccine Research Program Project Grants ZAI1 RRA-A (J1)
- 2012 – pres. **Performance and Safety Monitoring Board**, HIV Center for Clinical and Behavioral Studies, Columbia University.
- 2014 – pres. **Design and Safety Monitoring Board**, Designing and Assessing a Community Based Model of Antiretroviral Care (NIH Grant U01 GH0000765-01)
- 2015 **AIDS International Research Training Special Emphasis Panel** (AARR-H57). National Institutes of Health.
- 2015 **Social Determinants of Health Special Emphasis Panel** (AARR-F53). National Institutes of Health.
- 2015 **External Advisory Board**, Center for AIDS Research, University of Washington.
- 2015 **Reviewer**. NIH Special Emphasis Panel AARR-H57 (Fogarty International Center)
- 2016 **Reviewer**. NIH Special Emphasis Panel AARR-F92 (HIV and Big Data)
- 2016 **CSR New Innovator Review Panel**. National Institutes of Health
- 2016 **Site Reviewer**, Division of Intramural Population Health Research, NICHD
- 2018 **Reviewer**. International and Cooperative Projects (ICP1) Study Section, NIH
- 2018 **Reviewer**. Population and Public Health Approaches to HIV/AIDS (PPAH) Study Section, NIH.
- 2018 **Reviewer**. NIH Director's Early Independence Award Study Section (DP5).
- 2018 **External Advisory Board**, Center for AIDS Research, University of North Carolina.
- 2019 **Reviewer**, NIH BMRD Study Section
- 2019 **Reviewer**, NIH Fogarty International Center Study Section (ZRG1 AARR-N (57) R)
- 2020 **Cochran Prize Committee** for the journal *Observational Studies*
- 2021 **Reviewer**, NIH PPAH Study Section, NIH
- 2021 **Lagakos Alumni Award Committee**, Department of Biostatistics, Harvard SPH

### Peer Review Service

- 1994 – pres. **Peer Reviewer**. *Advances in Statistics, American Journal of Epidemiology, American Journal of Preventive Medicine, Annals of Applied Statistics, Annals of Epidemiology, Applied Statistics, Archives of General Psychiatry, Biometrics, Biostatistics, Clinical Trials, Epidemiology, F1000, Health Services and Outcomes Research Methodology, Health Services Research, International Journal of Biostatistics, Journal of Clinical Oncology, JAIDS, JAMA, JASA, Journal of the International AIDS Society, JRSS-B, Lifetime*

*Data Analysis, Psychological Methods, Sexually Transmitted Infections, Statistical Methods in Medical Research, Statistica Sinica, Statistical Communications in Infectious Disease, Statistics & Probability Letters, Statistics in Medicine*, Addison-Wesley Longman Publishers, Springer Verlag Publishers, Wiley & Sons Publishers.

### Conference Organizing and Service to Professional Societies

- 1997 **Organizer.** Invited paper session 'Drawing Inference under Non-ignorable Non-Response.' Biometric Society/ENAR Spring Meetings, Memphis.
- 1998 **Organizer.** Invited paper session 'Jointly Analyzing Longitudinal and Survival Data.' Joint Statistical Meetings, Dallas.
- 2000 **Review Committee.** Student Paper Competition, Biometric Society/ENAR Spring Meetings, Chicago.
- 2000 **Vice Program Chair.** Biometric Society/ENAR Spring Meetings, Chicago.
- 2000 **Organizing Committee Chair.** New England Statistics Symposium
- 2000 **Organizer.** Invited paper session 'Multilevel and Latent Variable Models for Infertility Studies.' Joint Statistical Meetings, Indianapolis.
- 2001 **Organizer.** Invited paper session 'Case Studies in Causal Inference.' Biometric Society/ENAR Spring Meetings, Charlotte.
- 2002 **Organizing Committee Member.** Workshop for Junior Researchers, Biometric Society/ENAR Spring Meetings, Washington DC.
- 2003 **Organizer.** Invited paper session 'Causal Inference from Longitudinal Data: Biostatistical and Econometric Approaches.' Biometric Society/ENAR Spring Meetings, Tampa.
- 2006 **Organizer.** Invited paper session 'Sensitivity Analysis for Missing Data and Causal Inference'. Joint Statistical Meetings, Seattle.
- 2007 **Organizer.** Invited paper session 'Design and Analysis of Behavioral Intervention Studies'. Biometric Society/ENAR Spring Meetings, Atlanta.
- 2008 **Reviewer.** Student Paper Competition, Section on Bayesian Statistical Sciences, ASA.
- 2009 **Program Committee,** Biometric Society/ENAR Spring Meetings, San Antonio.
- 2010 **Program Committee,** Biometric Society/ENAR Spring Meetings, New Orleans
- 2011 **Co-Organizer,** Pan-African Conference on Building Biostatistics Capacity in Sub-Saharan Africa, University of Botswana
- 2012 **Educational Advisory Committee,** Biometric Society/ENAR Spring Meetings, Washington DC.
- 2012 – 14 **Regional Committee** (Elected), Biometric Society/ENAR.
- 2013 – 15 **Reviewer, Student Paper Competition,** Biometric Society/ENAR
- 2013 – 14 **Organizing Committee Chair,** 2014 Atlantic Causal Inference Conference, Providence
- 2014 – 16 **Council of Sections Representative** (Elected), Biometrics Section, American Statistical Association
- 2015 **Organizing Committee,** NIAID Workshop 'Infectious Diseases Research: Quantitative Methods and Models in the Era of Big Data', Bethesda MD.
- 2018 **Organizing Committee,** NIAID Workshop 'Statistical Challenges and Opportunities in HIV/AIDS Research in the Era of Getting-to-Zero HIV Infection', Philadelphia.

- 2019           **Organizer**, NSF-TRIPODS Workshop ‘Models and Machine Learning for Causal Inference and Decision Making in Health Research’, Brown University.
- 2020 – 2024   **Member at Large**, Section on Statistics (Elected). American Academy for the Advancement of Science.
- 2020           **Organizer**, ‘Decoding Pandemic Data’ Lecture Series, Data Science Initiative Brown U
- 2020 – pres.   **Outreach Committee**, Society for Causal Inference

**Service to Local Community**

- 2001 – 06      **Board of Directors**, Taft Avenue Daycare, Inc.
- 2010 – 14      **Youth Basketball Coach**, City of Cranston Travel Basketball Program

**TEACHING****A. Courses taught**

\* = designed new course || = substantial revision / redesign

Semester	Course	Enrolled	Title
FA 1996	BC 291		Longitudinal Data Analysis (1/3 semester)
SP 1997	BC 291	7	Categorical Data Analysis (1/2 semester)
FA 1997	BC 213	N/A	Principles of Biostatistics and Data Analysis
FA 1998	BC 213	68	Principles of Biostatistics and Data Analysis
FA 1999	BC 213	45	Principles of Biostatistics and Data Analysis
SP 2000	BC 252	4	* Analysis of Survival Time Data
	BC 196	1	Senior Seminar in Statistics: Meta Analysis
FA 2000	BC 213	42	Principles of Biostatistics and Data Analysis
	BC 296	2	Independent Study: Missing Data in Longitudinal Studies
SP 2001	BC 252	3	Analysis of Survival Time Data
	BC 196	1	Senior Seminar in Statistics: Analysis of Area-Level Data
FA 2001	BC 213	48	Principles of Biostatistics and Data Analysis
SP 2002	BC 252	4	Analysis of Survival Time Data
	BC 196	1	Senior Seminar in Statistics: Analysis of Microarray Data
	BC 296	3	Independent Study: Regression for Multivariate Response Data
FA 2002	BC 213	45	Principles of Biostatistics & Data Analysis
	BC 296	1	Independent Study: Causal Inference
SP 2003	BC 253	10	* Analysis of Longitudinal Data
FA 2003	BC 203	38	Introduction to Biostatistics
SP 2004	BC 216	9	Applied Regression Analysis
	BC 295	1	Independent Study: Statistical Learning
FA 2004	BC 203	63	Introduction to Biostatistics
FA 2005	BC 213	24	Principles of Biostatistics and Data Analysis
SP 2006	BC 253	6	Analysis of Longitudinal Data
FA 2006	BC 213	27	Principles of Biostatistics and Data Analysis
SP 2007	BC 267	7	* Missing Data & Causal Inference
FA 2007	PHP 2510	37	Principles of Biostatistics and Data Analysis
SP 2008	PHP 2603	15	Analysis of Longitudinal Data
FA 2008	PHP 2510	32	Principles of Biostatistics and Data Analysis
SP 2009	IMSD	~20	* IMSD Module Co-Leader: Biostatistics
SP 2009	PHP 2670	12	Missing Data and Causal Inference
FA 2010	PHP 2510	40	Principles of Biostatistics and Data Analysis
SP 2011	PHP 2670	13	Missing Data and Causal Inference
SU 2011	IMSD	~20	IMSD Module Co-Leader: Biostatistics
FA 2011	PHP 2680	9	* Research Methods in Biostatistics
SP 2012	PHP 2511	19	Applied Regression Analysis
FA 2012	PHP 2610	16	Missing Data and Causal Inference

SP 2013	PHP 2511	22	Applied Regression Analysis
FA 2013	PHP 2520	22	Statistical Inference I
FA 2014	PHP 2610	27	Missing Data and Causal Inference
SP 2014	PHP 2690	12	* Statistical Foundations of Data Science
SP 2015	PHP 2630	8	Statistical Foundations of Data Science
FA 2016	PHP 2610	28	Missing Data and Causal Inference
FA 2017	PHP 0100	22	Statistics is everywhere (co-instructor)
FA 2018	PHP 2610	29	Causal inference and missing data
SP 2019	PHP 2517	19	* Multilevel data analysis (half course)
FA 2019	PHP 2610	34	Causal inference and missing data
FA 2020	PHP 2610	20	Causal inference and missing data

## B. PhD Theses Directed

1. **Vanja Dukic**, Ph.D. in Applied Mathematics, 2000 (co-advisor with C. Gatsonis)  
Professor of Applied Mathematics, University of Colorado  
*Hierarchical Bayesian Modeling for Discrete Data*  
van Ryzin Prize for Best Student Paper, ENAR Spring Meetings, 2000.
2. **Joo Yeon Lee**, Ph.D. in Biostatistics, 2007.  
Senior Statistical Reviewer, US Food & Drug Administration  
*Informative Priors and Sensitivity Analysis for Longitudinal Binary Data with Dropout*  
Distinguished Student Paper Award, ENAR Spring Meetings, 2006  
ASA Section on Bayesian Statistical Science Student Paper Award, JSM 2007
3. **Li Su**, Ph.D. in Biostatistics, 2007  
Senior Statistician, Medical Research Council Biostatistics Unit, Cambridge UK  
*Likelihood-based Semiparametric Regression for Correlated Binary Data*  
Distinguished Student Paper Award, ENAR Spring Meetings, 2006  
ASA Epidemiology Section Student Travel Award, JSM 2007
4. **Shira Dunsiger**, Ph.D. in Biostatistics, 2009  
Assistant Professor of Behavioral and Social Sciences (Research), Brown University  
*Latent Variable Models for Longitudinal Data in Behavioral Medicine*
5. **Ann Mwangi**, PhD in Biostatistics, 2011  
Senior Lecturer and Head of Department of Behavioural Science, Moi University School of Medicine, Eldoret, Kenya  
*Addressing Selection Bias in Observational Event History Data, with Application to HIV in Western Kenya*  
Distinguished Student Paper Award, ENAR Spring Meetings, 2011
6. **Jing Zhang**, PhD in Biostatistics, 2012  
*Causal Inference for Mediation*  
Student Travel Award, 2010 ISCB Annual Meetings, Montpellier, France
7. **Miles Ott**, PhD in Biostatistics, 2014

Associate Professor, Department of Mathematics and Statistics, Smith College  
*Analytic Methods for Network Data*

8. **Liangyuan Hu**, PhD in Biostatistics, 2015  
 Assistant Professor (Biostatistics), Icahn School of Medicine at Mount Sinai, New York City  
*Causal Models for Comparing and Optimizing HIV Treatment Strategies using Electronic Health Records Data*  
 Best Poster Award, 2014 International Workshop on HIV Observational Databases, Sitges, Spain
9. **Yizhen Xu**. PhD in Biostatistics, 2019  
 Postdoctoral Research Fellow, Department of Biostatistics, Johns Hopkins University  
*Bayesian Methods for Predictive and Causal Inference*

### C. SM Theses Directed

1. **Christina Korkontzelou**, SM in Biostatistics, 2001  
*Weighted Estimating Equations for Informative Dropout in Smoking Cessation Studies*  
 Chalmers Student Scholarship, Society for Clinical Trials, 2001.
2. **Parul Aneja**, SM in Biostatistics, 2005  
*Analysis of Longitudinal Survey Data on Educational Transitions via Pattern Mixture Models*
3. **Patricia Fox**, SM in Biostatistics, 2009  
*Transitions within states of lung function: A multinomial logistic approach using two-year follow-up data from bacteriologically cured tuberculosis patients*
4. **Youdan Wang**, SM in Biostatistics, 2012  
*Estimating mixing proportions from partially labeled data.*
5. **Edwin Sang**, SM in Biostatistics, 2013  
*Causal effect of HIV serostatus disclosure on mortality and loss to follow-up after HAART initiation using propensity score*  
 Outstanding Masters Thesis in Department of Biostatistics
6. **Evon Okidi**, SM in Biostatistics, 2014  
*Comparison of IPW and imputation methods for handling missing covariate data in survival analysis*
7. **Allan ge**, SM in Biostatistics, 2019  
*Harnessing the power of machine learning for clinical prediction*  
 Outstanding Masters Thesis in Department of Biostatistics
8. **Ryan Buckland**, SM in Biostatistics, 2020  
 (Co-advised with Elizabeth Chen, PhD)  
*A statistical approach to predicting suicidal thoughts and behaviors using natural language processing*  
 Outstanding Masters Thesis in Department of Biostatistics

#### D. Postdoctoral Fellows

1. **Hyejin Ko, Ph.D.**  
Postdoctoral Fellow in Biostatistics, 2000 – 2001  
Senior Consultant, Samsung SDS, Seoul, South Korea
2. **Tao Liu, Ph.D.**  
Postdoctoral Fellow in Biostatistics, 2006 – 2008  
Associate Professor of Biostatistics, Brown University

#### E. Thesis Committees

1. **Jenifer Allsworth, Ph.D.** Epidemiology, 2000
2. **Brian Quilliam, Ph.D.** Health Services Research, 2001
3. **Mei-Hsiu Chen, Ph.D.** Biostatistics, 2005
4. **Shang-Ying Shiu, Ph.D.** Biostatistics, 2006.
5. **Amara Ezeamama, Ph.D.** Epidemiology, 2006
6. **Hong Li, PhD** Biostatistics, 2008
7. **Hung-Lun Chien, MPH** 2007
8. **Yunxia Sui, Ph.D.** Biostatistics, 2010
9. **Xiaozhong Wen, PhD** Epidemiology, 2010
10. **Monica Bertoia, PhD** Epidemiology, 2012
11. **Michael Lopez, PhD** Biostatistics, 2014
12. **Lawrence Were, PhD** Health Services Policy & Practice, 2015
13. **Kirwa Kipruto, PhD** Epidemiology, 2015
14. **Yi Zhao, PhD** Biostatistics, 2017
15. **Yi Cao, PhD** Biostatistics

#### F. Other Teaching and Advising Roles

- 1995 – 1998 **Preceptor**, Resident Research Projects, Women & Infants' Hospital
- 1999 – pres **Advisor** in Undergraduate Statistics Concentration
- 1999 – pres. **Advisor** in Biostatistics Graduate Program (2-3 students/year)
- 2000 **Reader** for Honors Thesis in Environmental Science (1 student)
- 2000 – 2008 **Core Faculty** for Community Health Clerkship (BC 540)
- 2000 – 2004 **K-Award Research Co-Mentor**  
Project: Mentored Investigator in Women's Health  
Awardee: Lori Boardman, M.D., Women & Infants' Hospital (K23-HD01307)
- 2000 – pres. **Core Faculty** for Fogarty International Training Program in HIV/AIDS
- 2000 – pres. **Core Faculty**, NIH Training Grant  
Title: HIV and Other Infectious Consequences of Substance Abuse  
PI: Tim Flanigan, Brown University and Miriam Hospital (T32-DA013911)
- 2004 **Faculty Advisor**, Royce Undergraduate Fellowship Program
- 2004 – 2009 **K-Award Research Co-Mentor**  
Project: Combining DOT and Prevention for HIV+ Persons Leaving Prison

- Awardee: Jennifer Mitty, MD, Brown U / Miriam Hospital (K23-DA17622)
- 2005        **Board of Examiners** for PhD Dissertations (2)  
Department of Statistics, University of Madras, India
- 2006 – 2011    **K-Award Research Co-Mentor**  
Project: Routine HIV Testing in Primary Care Practices  
Awardee: Emma Simmons, MD, Brown U / Memorial Hosp (K23-MH078779)
- 2006 – 2011    **K-Award Research Co-Mentor**  
Project: Concurrent HAART and Tuberculosis Treatment: Drug Interactions  
Awardee: Awe Kwara, MD, Brown University / Miriam Hospital (K23-AI-71760)
- 2008 – 2013    **K-Award Research Co-Mentor**  
Project: Buprenorphine as a Bridge to HCV Treatment for HIV/HCV  
Coinfected Opioid Users  
Awardee: Lynn Taylor, MD, Brown U / Miriam Hospital (K23-DA-020383)
- 2013 – 2019    **K-Award Research Co-Mentor**  
Project: Linkage to care following home-based counseling and testing in western  
Kenya.  
Awardee: Becky Genberg, PhD, Brown U
- 2014        **External Examiner**, PhD committee for Agnes Kiragga  
Makarere University, Uganda
- 2019 – pres.,    **K-Award Research Co-Mentor**  
Project: Missing data in ecological momentary assessment studies  
Applicant: Manshu Yang, University of Rhode Island
- 2018 – pres.    **CTR Faculty Mentor**  
Project: New Methods to Evaluate the Effects of Opioids in Provider Based Networks  
Awardee: Ashley Buchanan, University of Rhode Island