

## Curriculum Vitae

Stephen R. Cole  
Department of Epidemiology  
Gillings School of Global Public Health  
University of North Carolina at Chapel Hill  
McGavran-Greenberg Hall, Campus Box 7435  
Chapel Hill, NC 27599-7435  
Phone: 919-966-7415  
Fax: 919-966-2089  
Email: [cole@unc.edu](mailto:cole@unc.edu)  
Website: <http://www.unc.edu/~colesr/>

## Professional Experience

- 2010 – Professor of Epidemiology  
*UNC Gillings School of Global Public Health*
- 2005 – 2010 Associate Professor of Epidemiology  
*UNC Gillings School of Global Public Health (2008 – 2010)*  
*Johns Hopkins Bloomberg School of Public Health (2005 – 2008)*
- 2000 – 2005 Assistant Professor of Epidemiology  
*Johns Hopkins Bloomberg School of Public Health*

## Education

- 1998 – 2000 Postdoctoral Fellow  
*Division of Preventive Medicine*  
*Harvard Medical School*
- 1993 – 1998 Ph.D.  
*Department of Epidemiology and Biostatistics*  
*University of South Florida College of Public Health*
- 1989 – 1993 B.S.  
*University of South Florida*

## Honors

CDC Charles C. Shepard Science Award, 2010  
Society for Epidemiologic Research Poster Prize, 2000, 2005, 2007, 2009, 2010  
Outstanding Review for Clinical Infectious Diseases, 2007  
University of South Florida Outstanding Dissertation Award, 1998  
Elected to Delta Omega public health honor society, 1995

**Publications** (>2570 ISI citations, h-index = 27)

## Refereed Paper

1. \*Howe CJ, Cole SR, Ostrow DG, Mehta S, Kirk GD. A prospective study of alcohol consumption and HIV acquisition among injection drug users. *AIDS*; 2011; 25: 221-8 PMID: 21099668.
2. \*Howe CJ, Cole SR, Chmiel JS, Munoz A. Limitation of using probability-of-censoring weights to estimate survival in the presence of strong selection bias induced by artificial censoring. *American Journal of Epidemiology* 2011; In press.
3. \*Westreich D, Cole SR, Jonsson Funk M, Brookhart MA, Sturmer T. The role of the c-statistic in variable selection for propensity score models. *Pharmacoepidemiology and Drug Safety*; 2011; In press PMID: 21154576.
4. Lau B, Cole SR, Gange S. Parametric mixture models to evaluate and summarize hazard ratios in the presence of competing risks with time-dependent hazards and delayed entry. *Statistics in Medicine* 2011; In press PMID: 21120818.
5. Achenbach CJ, Cole SR, Casper C, Willig JH, Mugavero MJ, Kitahata MM, Saag MS. Survival after cancer diagnosis among HIV-infected patients treated with antiretroviral therapy. *AIDS* 2011; In press PMID: 21160411.
6. Richardson DB, MacLehose RF, Langholz B, Cole SR. Hierarchical latency models for dose-time-response associations. *American Journal of Epidemiology* 2011; In press.
7. Chu H, Nie L, Cole SR. Estimating the relative excess risk ratio due to interaction: a Bayesian approach. *Epidemiology* 2011; 22: 242-8 PMID: 21228700.
8. O'Brien KM, Cole SR, Tse CK, Perou CM, Carey LA, Foulkes WD, Dressler LG, Geradts J, Millikan RC. Intrinsic breast cancer subtypes, race, and long-term survival in the Carolina Breast Cancer Study (with discussion). *Clinical Cancer Research* 2011; 16: 6100-10 PMID: 21169259.
9. Stuart EA, Cole SR, Bradshaw CP, Leaf PJ. The use of propensity scores to assess the generalizability of results from randomized trials. *JRSS-A* 2011; In press.
10. Reich NG, Lessler J, Chu H, Cole SR. Identification of the asymptomatic ratio. *Epidemiology* 2011; In press.

11. Hoots BE, Jamieson DJ, Paramsothy P, Hudgens M, Cole SR, Klein RS, Mayer KH, Rompalo AM, Schuman PC, Smith JS. Association of herpes simplex virus type 2 with the progression of HIC infection in the HERS cohort. *American Journal of Epidemiology* 2011; In press.
12. Cole SR, Stuart EA. Generalizing evidence from randomized clinical trials to target populations: the ACTG-320 trial. *American Journal of Epidemiology* 2010; 172: 107-115 PMID: 20547574
13. Cole SR, Jacobson LP, Tien PC, Kingsley L, Chmiel JS, Anastos K. Using marginal structural measurement-error models to estimate the long-term effect of antiretroviral therapy on incidence AIDS or death. *American Journal of Epidemiology* 2010; 171: 113-22 PMID: 19934191
14. Cole SR, Napravnik S, Mugavero MJ, Lau B, Eron JJ, Saag MS. Copy-years viremia as a measure of cumulative HIV viral burden. *American Journal of Epidemiology* 2010; 171: 198-205 PMID: 20007202
15. Cole SR, Hudgens MG. Survival analysis in infectious disease research: Describing events in time. *AIDS* 2010; 24: 2423-31 PMID: 208227167
16. Cole SR, Platt RW, Schisterman EF, Chu H, Westreich D, Richardson DB, Poole C. Illustrating bias due to conditioning on a collider. *International Journal of Epidemiology* 2010; 39L: 417-20 PMID: 19926667
17. \*Westreich D, Cole SR, Tien PC, Chmiel JS, Kingsley L, Jonsson Funk M, Anastos K, Jacobson LP. Time scale and adjusted survival curves for marginal structural models. *American Journal of Epidemiology* 2010; 171: 691-700 PMID: 20139124
18. \*Westreich D, Cole SR. Positivity in practice. *American Journal of Epidemiology* 2010; 171: 674-7 PMID: 20139125
19. \*Howe CJ, Cole SR, Napravnik S, Eron JJ. Enrollment, retention and visit attendance in the UNC CFAR HIV clinical cohort, 2001-7. *AIDS Hum Retrov.* 2010; 26: 875-81 PMID: 20672995
20. \*Howe CJ, Sander PM, Plankey MW, Cole SR. Effects of time-varying exposures adjusting for time-varying confounders: The case of alcohol consumption and risk of incident human immunodeficiency virus infection. *Int J Pub Health.* 2010; 55: 227-8 PMID: 20143124
21. \*Shiels MS, Cole SR, Mehta SH, Kirk GD. Lung cancer incidence and mortality among HIV-infected and HIV-uninfected injection drug users. *JAIDS* 2010; 55: 510-5 PMID: 20838223

22. \*Shiels MS, Cole SR, Chmiel JS, Margolick J, Martinson J, Zhang ZF, Jacobson LP. A comparison of *ad hoc* methods to account for non-cancer AIDS and deaths as competing risks when estimating the effect of HAART on incident cancer AIDS among HIV-infected men. *Journal of Clinical Epidemiology* 2010; 63: 459-67 PMID: 19880284
23. \*Sander P, Cole SR, Ostrow DG, Kirk GD. Determinants of alcohol consumption in HIV uninfected injection drug users. *Alcohol and Drug Dependence* 2010; 111: 173-6 PMID: 20547014
24. Nandi A, Glass TA, Cole SR, Chu H, Galea S, Celentano DD, Kirk GD, Vlahov D, Latimer WW, Mehta SH. Neighborhood poverty and injection cessation in a sample of injection drug users. *American Journal of Epidemiology* 2010; 171: 391-8 PMID: 20093307
25. Porter KA, Burch CL, Poole C, Juliano JJ, Cole SR, Meshnick SR. Uncertain outcomes: Adjusting for misclassification in anti malarial efficacy studies. *Epidemiology and Infection* 2010; 12: 1-8 PMID: 20619072
26. Chu H, Cole SR. Estimation of risk ratios in cohort studies with common outcomes: a Bayesian approach. *Epidemiology* 2010; 21: 855-62 PMID: 2084438
27. Chu H, Zhou Y, Cole SR, Ibrahim JG. Latent class models for screening studies using two binary screening tests with categorical disease status verified only on the test positives. *Statistics in Medicine* 2010; 29: 1206-18 PMID: 20191614
28. Nie L, Liu C, Chu H, Cole SR, Vexler A, Schisterman EF. Linear regression with an independent variable subject to a detection limit. *Epidemiology* 2010; 21: S17-S24 PMID: 20502336
29. Nei L, Chu H, Li F, Cole SR. Relative excess risk due to interaction: resampling-based confidence intervals. *Epidemiology* 2010; 21: 552-6 PMID: 20502336
30. Yotebieng M, Van Rie A, Moultrie H, Cole SR, Adimora A, Behets F, Meyers T. Effect on mortality and vorlogical response of delaying antiretroviral therapy initiation in children receiving tuberculosis treatment. *AIDS* 2010; 24: 1341-9 PMID: 20559039
31. Howard AA, Hoover DR, Anastos K, Wu X, Shi Q, Strickler HD, Cole SR, Cohen MH, Kovacs A, Augenbraun M, Latham PS, Tien PC. The effects of opiate use and hepatitis C virus infection on the risk of diabetes mellitus in the Women's Interagency HIV Study. *JAIDS* 2010; 54: 152-9 PMID: 20190642.
32. Hatt SR, Leske DB, Yamada T, Bradley EA, Cole SR, Holmes JM. Development and initial validation of quality-of-life questionnaires for intermittent exotropia. *Ophthalmology*. 2010; 117: 163-8 PMID: 19896195

33. Felius J, Chandler DL, Holmes JM, Chu RH, Cole SR, Hill M, Huang K, Kulp MY, Lazar EL, Matta NS, Melia M, Wallace DK. Evaluating the burden of amblyopia treatment from the patient and child's perspective. *Journal of the American Association of Pediatric Ophthalmology and Strabismus* 2010; 14: 389-95 PMID: 21035063.
34. Cole SR, Nie L, Chu H. Nonparametric estimator of relative time with application to the Acyclovir Prevention Trial. *Clinical Trials* 2009; 6: 320-8 PMID: 19667028
35. Cole SR, Chu H, Nie L, Schisterman EF. Estimating the odds ratio when exposure has a limit of detection. *International Journal of Epidemiology* 2009; 38: 1674-80 PMID: 19667054
36. Cole SR, Frangakis CE. The consistency statement in causal inference: a definition or an assumption? *Epidemiology* 2009; 20: 3-5.
37. \*Cain LE, Cole SR. Noncompliance-corrected effect of randomized highly active antiretroviral therapy on incident AIDS or death using inverse probability-of-censoring weights. *Statistics in Medicine* 2009; 28: 1725-38.
38. \*Cain LE, Cole SR, Greenland S, Brown TT, Chmiel JS, Kingsley L, Detels R. Effect of highly active antiretroviral therapy on incident AIDS using calendar period as an instrumental variable. *American Journal of Epidemiology* 2009; 169:1124-32.
39. \*Shiels MS, Cole SR, Kirk GD, Poole C. A meta-analysis of the incidence of non-AIDS cancers in HIV-infected individuals. *JAIDS* 2009; 52: 611-22. PMID: 19770804
40. \*Wang M-H, Shugart YY, Cole SR, Platz EA. A simulation study of control sampling methods in nested case-control studies of candidate genes and prostate cancer progression (with discussion). *Cancer, Epidemiology, Biomarkers and Prevention* 2009; 18: 706-11.
41. Sterne JAC, May M, Costagliola D, de Wolf F, Phillips A, Jönsson ML, Prins M, Gill J, Thiebaut R, Miró JM, Justice A, Smith C, Ledergerber B, Fatkenheuer G, Hogg R, D'Arminio Monforte A, Staszewski S, Saag M, Kitahata M, Harris R, Egger M, Cole SR. When should HIV-infected persons initiate antiretroviral therapy? (with discussion). *Lancet* 2009; 373;1352-6.
42. Palella FJ, Armon C, Buchacz K, Cole SR, Chmiel JA, Novak R, Wood K, Moorman AC, Brooks JT. Association of HIV susceptibility testing with survival among HIV-infected patients receiving antiretroviral therapy: a cohort study (with discussion). *Annals of Internal Medicine* 2009; 151: 73-84. PMID: 19620160

43. Taha T, Kumwenda J, Cole SR, Hoover DR, Kafulafula G, Fowler MG, Thigpen MC, Li Q, Mipando L, Nkanauanena K, Kumwenda NI, Mofenson L. Postnatal HIV-1 transmission after cessation of extended infant antiretroviral prophylaxis and effect of maternal HAART (with discussion). *Journal of Infectious Disease* 2009; 200: 1490-7. PMID: 19832114
44. Lesage SR, Mosley TH, Wong TY, Szklo M, Knopman DS, Catellier DJ, Cole SR, Coresh J, Coker LH, Sharrett AR. Retinal microvascular abnormalities and cognitive decline: the Atherosclerosis Risk in Communities 14 year follow-up study. *Neurology* 2009; 73: 862-8. PMID: 19752453
45. Hernán MA, Cole SR. Causal diagrams and measurement bias (with discussion). *American Journal of Epidemiology* 2009; 170: 959-62. PMID: 19755635
46. Platt R, Schisterman EF, Cole SR. Time modified confounding. *American Journal of Epidemiology* 2009; 170: 687-94. PMID: 19675141
47. Lau B, Cole SR, Gange S. Competing risk regression models for epidemiologic data. *American Journal of Epidemiology* 2009; 170: 244-56.
48. Schisterman EF, Cole SR, Platt R. Overadjustment in epidemiologic research (with discussion). *Epidemiology* 2009; 20: 488-95.
49. Chu H, Cole SR, Wei Y, Ibrahim JG. Estimation and inference for case-control studies with multiple non-gold-standard exposure assessments: an occupational health application. *Biostatistics* 2009; 10: 591-602.
50. Chu H, Nie L, Cole SR, Poole C. Meta-analysis of diagnostic accuracy studies accounting for disease prevalence. *Statistics in Medicine* 2009; 28: 2384-99.
51. Cook RL, Zhu F, Belnap BH, Hum B, Weber K, Cohen M, Cook JA, Vlahov D, Wilson TE, Hessel NA, Plankey M, Howard AA, Cole SR, Sharp GB, Richardson JL. Longitudinal trends in hazardous alcohol consumption in women with HIV infection, 1995-2006. *American Journal of Epidemiology* 2009; 169: 1025-32.
52. Tien PC, Schneider MF, Cole SR, Cohen MH, Glesby MJ, Lazar J, Nowicki M, Young M, Kaplan RC. Association of hepatitis C virus and HIV infection with subclinical atherosclerosis in the Women's Interagency HIV Study. *AIDS* 2009; 24: 1781-4.
53. Hatt SR, Leske DA, Bradley EA, Cole SR, Holmes JM. Comparison of quality of life instruments in adults with strabismus. *American Journal of Ophthalmology*. 2009; 148: 558-62.

54. Womack J, Scherzer R, Cole SR, Fennie K, Williams AB, Grey M, Minkoff H, Anastos K, Cohen MH, Tien PC. Hormonal contraception and metabolic outcomes in women with or at risk for HIV infection. *JAIDS* 2009; 52: 581-7 PMID: 19950431
55. Wong CS, Pierce CB, Cole SR, Warady BA, Mak RHK, Benador NM, Kaskel F, Furth SL, Schwartz GJ. Association of proteinuria with race, cause of chronic kidney disease, and glomerular filtration rate in the Chronic Kidney Disease in Children Study (with discussion). *Clinical JASN* 2009; 4: 812-9.
56. Mugavero MJ, Lin HY, Allison JJ, Giodano TP, Willig JH, Raper JL, Wray NP, Cole SR, Schumacher JE, Davies S, Saag MS. Racial disparities in HIV virologic failure: do missed visits matter? *JAIDS* 2009; 50: 100-8.
57. Hatt SR, Leske DA, Bradley EA, Cole SR, Holmes JM. Development of a quality of life questionnaire for adults with strabismus. *Ophthalmology* 2009; 116: 139-44.
58. Cole SR, Hernán MA. Constructing inverse probability weights for marginal structural models. *American Journal of Epidemiology* 2008; 168:656-64.
59. \*Lopez-Gatell H, Cole SR, Margolick JB, Witt MD, Martinson J, Phair J, Jacobson LP. Effect of tuberculosis on the survival of HIV-infected men. *AIDS* 2008; 22: 1869-73.
60. \*Shiels MS, Cole SR, Wegner S, Armenian H, Chmiel J, Marconi V, Martinson J, Martinez-Maza O, Wortmann G, Whitman T, Jacobson LP, Crum-Cianflone NF. Effect of HAART on incident cancer and non-cancer AIDS events among male HIV seroconverters. *JAIDS* 2008; 48: 485-90.
61. \*Nawar EW, Cole SR, Farzadegan H, Witt MD, Jenkins FJ, Margolick JB, Phair JP, Jacobson LP. Sexual activity and Kaposi's sarcoma among HIV-1 and HHV-8 co-infected men. *Annals of Epidemiology* 2008; 18: 572-81.
62. Tien PC, Schneider MF, Cole SR, Levine AM, Cohen M, DeHovitz J, Young M, Justman JE. Antiretroviral therapy exposure and insulin resistance in the Women's Interagency HIV Study. *JAIDS* 2008; 49: 369-76.
63. Robison LS, Westfall AO, Mugavero MJ, Kempf MC, Cole SR, Allison JJ, Willig JH, Raper JL, Wilcox CM, Saag MS. Short-term Discontinuation of HAART Regimens More Common in Vulnerable Patient Populations. *AIDS Res Hum Retroviruses* 2008; 24: 1347-55.
64. Holmes JM, Strauber S, Quinn GE, Cole SR, Felius J, Kulp M, for the Pediatric Eye Disease Investigator Group. Further validation of the amblyopia treatment index parental questionnaire. *Journal of the American Association of Pediatric Ophthalmology and Strabismus* 2008; 12: 581-4.

65. Klebanoff M, Cole SR. Use of multiple-imputation in the epidemiologic literature. *American Journal of Epidemiology* 2008; 168: 355-7.
66. Lau B, Cole SR, Gange SJ, Moore RD. Evaluating competing adverse and beneficial outcomes using a mixture model. *Statistics in Medicine* 2008; 27: 4313-27.
67. Flynn JY, Mitsnefes M, Pierce C, Cole SR, Parekh RS, Furth SL, Warady BA. Blood pressure in children with chronic kidney disease: Preliminary findings from the Chronic Kidney Disease in Children Cohort Study. *Hypertension* 2008. 52:631-7.
68. Sobieszcyk ME, Hoover DR, Anastos K, Mulligan K, Tan T, Shi Q, Gao W, Hyman C, Cohen MH, Cole SR, Plankey M, Levine AM, Justman J. Prevalence and predictors of metabolic syndrome among HIV-infected and HIV-uninfected women in the Women's Interagency HIV Study. *JAIDS* 2008; 48: 272-80.
69. Justman JE, Hoover DR, Shi Q, Tan T, Anastos K, Tien PC, Cole SR, Hyman C, Karim R, Weber K, Grinspoon S. Longitudinal anthropometric patterns among HIV-infected and HIV-uninfected women. *JAIDS* 2008; 47:312-9.
70. Fadrowski JJ, Pierce CB, Cole SR, Moxey-Mims MM, Warady BA, Schwartz GJ, Munoz A, Furth SL. Anemia during early chronic kidney disease: preliminary results form the CKiD cohort study. *Clinical Journal of the American Society of Nephrology* 2008; 3: 457-62.
71. Cole SR, Chu H, Brookmeyer R. Confidence intervals for biomarker-based incidence estimates using prevalent data. *American Journal of Epidemiology* 2007; 165: 94-100.
72. Cole SR, Hernán MA, Anastos K, Jamieson BD, Robins JM. A marginal structural left-censored mean model for the effect of highly active antiretroviral therapy on changes in HIV-1 viral load. *American Journal of Epidemiology*; 2007; 166: 219-27.
73. \*López-Gatell H, Cole SR, Hessol N, French AL, Greenblatt RM, Landesman S, Preston-Martin S, Anastos K. Effect of tuberculosis on the survival of HIV-infected women. *American Journal of Epidemiology* 2007; 165: 1134-42.
74. Tien PC, Schneider MF, Cole SR, Levine A, Cohen M, de Hovitz M, Young M, Justman JE. Cumulative exposure to nucleoside analogs is associated with incidence of diabetes mellitus in the Women's Interagency HIV study. *AIDS* 2007; 21: 1739-45.
75. Tien PC, Schneider MF, Cole SR, Justman JE, French AL, Young M, DeHovitz J, Nathwani N, Brown TT. Relation of stavudine discontinuation with anthropometric changes among HIV-infected women. *JAIDS* 2007; 44: 43-8.



76. Tien PC, Barrón Y, Justman JE, Hyman C, Cohen MH, Young M, Kovacs A, Cole SR. Antiretroviral therapies associated with lipoatrophy in HIV-infected women. *AIDS Patient Care STDs* 2007; 21: 297-305.
77. Furth SL, Cole SR, Fadrowski JJ, Gerson A, Pierce CB, Chandra M, Weiss R, Kaskel F. The association of anemia and hypoalbuminemia with accelerated decline in GFR among adolescents with chronic kidney disease. *Pediatric Nephrology* 2007; 22: 265-71.
78. Anastos K, Lu D, Shi Q, Tien P, Kaplan R, Hessel N, Cole S, Vigen C, Cohen M, Young M, Justman J. Association of serum lipid levels with HIV serostatus, specific antiretroviral agents and treatment regimens. *JAIDS* 2007; 45: 34-42.
79. Cole SR, Chu H, Greenland S. Multiple imputation for measurement error correction (with discussion). *International Journal of Epidemiology* 2006; 35: 1074-81.
80. Cole SR, Chu H, Allison PD, Gange SJ. Combined analysis of retrospective and prospective occurrences in cohort studies: HIV-1 serostatus and incident pneumonia. *International Journal of Epidemiology* 2006; 35: 1442-6.
81. \*Cain LE, Cole SR, Chmiel JS, Margolick JB, Rinaldo CR, Detels R. Effect of highly active antiretroviral therapy on multiple AIDS defining illnesses among male HIV seroconverters. *American Journal of Epidemiology* 2006; 163: 310-5.
82. Sutcliffe S, Zenilman JM, Ghanem KG, Jadack RA, Sokoll LJ, Elliott DJ, Nelson WG, De Marzo AM, Cole SR, Isaacs WB, Platz EA. Sexually transmitted infections and prostatic inflammation/cell damage as measured by serum prostate specific antigen concentration. *Journal of Urology* 2006; 175: 1937-42.
83. Chu H, Nie L, Cole SR. Sample size and statistical power assessing the effect of interventions in the context of mixture distributions with detection limits. *Statistics in Medicine* 2006; 25: 2647-57.
84. Chu H, Wang Z, Cole SR, Greenland S. Sensitivity analysis of misclassification: A graphical and a Bayesian approach. *Annals of Epidemiology* 2006; 16: 834-41.
85. Chu H, Cole SR. Estimating incidence using prevalent data in high risk groups with missing data. *Biometrical Journal* 2006; 48: 772-9.
86. Schwartz GJ, Furth SL, Cole SR, Moxey-Mims MM, Warady B, Muñoz A. Glomerular filtration rate determined by Iohexol disappearance from the blood: pilot study for a nation-wide cohort study of chronic kidney disease in children. *Kidney International* 2006; 69: 2070-7.

87. Kubzansky LD, Cole SR, Kawachi I, Vokonas P, Sparrow D. Shared and unique contributions of anger, anxiety, and depression to coronary heart disease: a prospective study in the Normative Aging Study. *Annals of Behavioral Medicine* 2006; 31: 21-9.
88. Fadrowski J, Cole SR, Hwang W, Fiorenza J, Gerson A, Furth SL. Changes in physical and psychosocial functioning among adolescents with chronic kidney disease. *Pediatric Nephrology* 2006; 21: 394-9.
89. Holmes JM, Leske DA, Cole SR, Chandler DL, Repka MX, and the Pediatric Eye Disease Investigator Group. A Symptom Survey and Quality of Life Questionnaire for Nasolacrimal Duct Obstruction in Children. *Ophthalmology* 2006; 113: 1675-80.
90. Nie L, Chu H, Cole SR. A general approach for sample size and statistical power calculations assessing the effects of interventions using a mixture model in the presence of detection limits. *Contemporary Clinical Trials* 2006; 27: 483-91.
91. Furth SL, Cole SR, Moxey-Mims M, Kaskel F, Mak R, Schwartz G, Wong C, Muñoz A, Warady B. Design and methods of the Chronic Kidney Disease in children (CKiD) prospective cohort study. *Clinical Journal of the American Society of Nephrology* 2006; 1: 1006-15.
92. Cole SR, Hernán MA, Margolick JB, Cohen MH, Robins JM. Marginal structural models for estimating the effect of highly active antiretroviral therapy initiation on CD4 cell count. *American Journal of Epidemiology* 2005; 162: 471-8.
93. Cole SR, Chu H. Effect of acyclovir on ocular herpes recurrence using a structural nested model. *Contemporary Clinical Trials* 2005; 26: 300-10.
94. Brown TT, Cole SR, Li X, Palella FJ, Riddler SA, Visscher B, Margolick JB, Dobs AS. Antiretroviral therapy and the prevalence and incidence of diabetes mellitus in the multicenter AIDS cohort study. *Archives of Internal Medicine* 2005; 165: 1179-84.
95. Brown TT, Li X, Cole SR, Kingsley LA, Palella FJ, Riddler SA, Chmiel JS, Visscher BR, Margolick JB, Dobs AS. Cumulative exposure to nucleoside analogue reverse transcriptase inhibitors is associated with insulin resistance markers in the Multicenter AIDS Cohort Study. *AIDS* 2005; 19: 1375-83.
96. Hernán MA, Cole SR, Margolick J, Cohen M, Robins JM. Structural accelerated failure time models for survival analysis in studies with time-varying treatments. *Pharmacoepidemiology and Drug Safety* 2005; 14: 477-91.
97. Wang CL, Vlahov D, Galai N, Cole SR, Bareta J, Pollini R, Mehta SH, Nelson KE, Galea S. The effect of HIV infection on overdose mortality. *AIDS* 2005; 19: 935-42.

98. Newschaffer CJ, Cole SR. Risk Factors for Autism: perinatal factors, parental psychiatric history and socioeconomic status. *American Journal of Epidemiology* 2005; 161: 926-8.
99. Cole SR, Li R, Anastos K, Detels R, Young M, Chmiel JS, Muñoz A. Accounting for lead-time in cohort studies: evaluating when to initiate HIV therapies. *Statistics in Medicine* 2004; 23: 3351-63.
100. Cole SR, Allison PD, Ananth CV. Estimation of cumulative odds ratios. *Annals of Epidemiology* 2004; 14: 172-8.
101. Cole SR, Hernán MA. Adjusted survival curves with inverse probability weights. *Computer Methods and Programs in Biomedicine* 2004; 75: 45-9.
102. Chu H, Ren S, Cole SR. Sample size calculation for the mean in a two component nonstandard mixture distribution. *Biometrical Journal* 2004; 5: 565-71.
103. Barron Y, Cole SR, Anastos K, Cohen MH, DeHovitz J, Delapenha R, Levine A, Gange SJ. Effect of discontinuing antiretroviral therapy on survival of HAART initiated women. *AIDS* 2004; 18: 1579-84.
104. Tien PC, Kovacs A, Bacchetti P, French AL, Augenbraun M, Cole SR, Hessel N, Justman J. Association of genital ulcer disease and recreational drug use with hepatitis B virus infection in the Women's Interagency HIV Study. *Clinical Infectious Diseases* 2004; 39: 1363-70.
105. Palella FA, Cole SR, Visscher B, Dobs A, Williams C. Anthropometrics and examiner- and self-reported body habitus changes in the Multicenter AIDS Cohort Study. *Clinical Infectious Diseases* 2004; 38: 903-7.
106. Pediatric Eye Disease Investigator Group (writing committee: Homes JM, Beck RW, Kraker RT, Astle WF, Birch EE, Cole SR, Cotter SA, Donahue S, Everett DF, Hertle RW, Keech RV, Paysse E, Quinn GE, Repka MX, Scheiman MM). Risk of amblyopia recurrence after cessation of treatment. *Journal of the American Association of Pediatric Ophthalmology and Strabismus* 2004; 8: 420-8.
107. Dominici F, Cole SR, Spiegelman D. Methodological contributions to the American Journal of Epidemiology. *American Journal of Epidemiology* 2004; 160: 197-8.
108. Cole SR, Hernán MA, Robins JM, Anastos K, Chmiel J, Detels R, Ervin C, Feldman J, Greenblatt R, Kingsley L, Lai S, Young M, Cohen M, Muñoz A. Effect of highly active antiretroviral therapies on time to AIDS or death using marginal structural models. *American Journal of Epidemiology* 2003; 158: 687-94.

109. Riddler SA, Smit E, Cole SR, Li R, Chmiel J, Dobs A, Palella F, Visscher B, Evans R, Kingsley LA. Serum lipids and antiretroviral therapy among HIV-infected men. *Journal of the American Medical Association* 2003; 289: 2978-82.
110. Tien P, Cole SR, Williams C, Li R, Justman J, Cohen MH, Young M, Rubin N, Augenbraun M, Grunfeld C. Incidence of lipoatrophy and lipohypertrophy in the Women's Interagency HIV Study. *JAIDS* 2003; 34: 461-6.
111. Pediatric Eye Disease Investigator Group (writing committee: Holmes JM, Beck RW, Kraker R, Cole SR, Repka MA, Birch EE, Felius J, Christiansen SP, Coats DK, Kulp MT). Impact of patching and atropine treatment on the child and family in the Amblyopia Treatment Study. *Archives of Ophthalmology* 2003; 121:1625-32.
112. Pediatric Eye Disease Investigator Group (writing committee: Repka MX, Beck RW, Kraker RT, Holmes JM, Birch EE, Cole SR, Summers CG, Wheeler DT, Havertape SA, Tampkins SM). A comparison of atropine and patching treatments for moderate amblyopia by patient age, cause of amblyopia, depth of amblyopia, and other factors. *Ophthalmology* 2003; 110: 1632-8.
113. Cole SR, Hernán MA. Fallibility in estimating direct effects (with discussion). *International Journal of Epidemiology* 2002; 31: 163-5.
114. Cook NR, Cole SR, Hennekens CH. Use of a marginal structural model to determine the effect of aspirin on cardiovascular mortality in the Physicians' Health Study. *American Journal of Epidemiology* 2002; 155:1045-53.
115. Blair RC, Cole SR. Two-sided equivalence testing of the difference between two means. *Journal of Modern Applied Statistical Methods* 2002; 1: 139-42.
116. Beck RW, Chandler DL, Cole SR, Simon JH, Jacobs LD, Kinkel RP, Selhorst JB, Rose JW, Cooper JA, Rice G, Murray TJ, Sandrock AW. Interferon beta-1a for early Multiple Sclerosis: CHAMPS Trial subgroup analyses. *Annals of Neurology* 2002; 51: 481-90.
117. Pediatric Eye Disease Investigator Group (writing committee: Wright KW, Kraker R, Beck RW, Holmes JM, Repka MX, Birch EE, Moke PS, Blair RC, Cole SR, Crouch ER, Ruttum MS, Ticho BH, Helveston EM). The clinical spectrum of early-onset esotropia: experience of the congenital esotropia observational study. *American Journal of Ophthalmology* 2002; 133: 102-8.
118. Pediatric Eye Disease Investigator Group (writing committee: Wright KW, Kraker R, Beck RW, Holmes JM, Repka MX, Birch EE, Moke PS, Blair RC, Cole SR, Crouch ER, Ruttum MS, Ticho BH, Helveston EM). Spontaneous resolution of early-onset esotropia: experience of the congenital esotropia observational study. *American Journal of Ophthalmology* 2002; 133: 109-18.

119. Pediatric Eye Disease Investigator Group (writing committee: Beck RW, Birch EE, Cole SR, Everett DF, Hertle RW, Holmes JM, Kraker RT, Repka MX). A randomized trial of atropine vs patching for treatment of moderate amblyopia in children (with discussion). *Archives of Ophthalmology* 2002; 120: 268-78.
120. Pediatric Eye Disease Investigator Group (writing committee: Repka MX, Beck RW, Kraker RT, Cole SR, Holmes JM, Birch EE, Tien R, Astle WF, Cotter SA). The clinical profile of moderate amblyopia in children younger than 7 years. *Archives of Ophthalmology* 2002; 120: 281-7.
121. CHAMPS Study Group (writing committee: Beck RW, Chandler DL, Cole SR, Eggenberger E, Jacobs L, Kinkel RP, Murray TJ, Rolak L, Rosenberg J, Sandrock A, Simon J, Simonian N). Baseline MRI characteristics of patients at high risk for multiple sclerosis: results from the CHAMPS trial. *Multiple Sclerosis* 2002; 8: 330-8.
122. CHAMPS Study Group (writing committee: Beck RW, Chandler DL, Cole SR, Jacobs L, Kinkel RP, Murray P, O'Connor P, Sandrock A, Scott T, Simon J). Predictors of short-term disease activity following a first clinical demyelinating event: analysis of the CHAMPS placebo group. *Multiple Sclerosis* 2002; 8: 405-9.
123. CHAMPS Study Group (writing committee: Beck RW, Chandler DL, Cole SR, Kinkel RP, Jacobs L, Sandrock A, Simon J). MRI predictors of early conversion to clinically definite MS in the Champs placebo group. *Neurology* 2002; 59: 998-1005.
124. Cole SR, Ananth CV. Regression models for unconstrained, partially or fully constrained continuation odds ratios. *International Journal of Epidemiology* 2001; 30: 1379-82.
125. Cole SR, Kawachi I, Liu S, Gaziano JM, Manson JE, Buring JE, Hennekens CH. Time urgency and risk of nonfatal myocardial infarction (with discussion). *International Journal of Epidemiology* 2001; 30: 363-9.
126. Cole SR. Analysis of complex survey data using SAS. *Computer Methods and Programs in Biomedicine* 2001; 64: 65-9.
127. Cole SR, Beck RW, Moke PS, Celano MP, Drews CD, Repka MA, Holmes JM, Birch EE, Kraker R, Kip KE. The Amblyopia Treatment Index. *Journal of the American Association of Pediatric Ophthalmology and Strabismus* 2001; 5: 250-4.
128. CHAMPS Study Group (writing committee: Beck RW, Chandler DL, Cole SR, Felton W, Galetta S, Jacobs L, Kinkel RP, Kupersmith M, Murray TJ, Newman N, Sandrock A, Simon J, Simonian N). Interferon  $\beta$ -1a for Optic Neuritis patients at high risk for Multiple Sclerosis. *American Journal of Ophthalmology* 2001; 132: 463-71.

129. Liu S, Lee IM, Ajani U, Cole SR, Buring JE, Manson JE. Intake of vegetables rich in carotenoids and risk of coronary heart disease in men: results from the Physicians' Health Study (with discussion). *International Journal of Epidemiology* 2001; 30: 130-5.
130. Kip KE, Cohen F, Cole SR, Wilhelmus KR, Patrick DL, Blair RC, Beck RW, for the Herpetic Eye Disease Study Group. Recall bias in a prospective cohort study of acute time-varying exposures: Example from the Herpetic Eye Disease Study. *Journal of Clinical Epidemiology* 2001; 54: 482-7.
131. Cole SR, Kawachi I, Maller SJ, Berkman LF. Test of item-response bias in the CES-D scale: Experience from the New Haven EPESE study. *Journal of Clinical Epidemiology* 2000; 53: 285-9.
132. Cole SR, Beck RW, Moke PS, Gal R, Long DL, and the Optic Neuritis Study Group. The National Eye Institute Visual Function Questionnaire: experience of the ONTT. *Investigative Ophthalmology & Visual Science* 2000; 41: 1017-21.
133. Herpetic Eye Disease Study Group (writing committee: Cohen F, Cole SR, Beck RW, Blair RC, Moke PS, Kip KE, Wilhelmus KR, Dawson CR, Barron BA, Jones DB, Kaufman HE, Stulting D, Sugar J, Cohen EJ, Hyndiuk RA, Asbell PA, Kurinij N). Psychological stress and other potential triggers for recurrences of herpes simplex virus eye infections (with discussion). *Archives of Ophthalmology* 2000; 118: 1617-25.
134. Liu S, Manson JE, Lee IM, Cole SR, Hennekens CH, Willett W, Buring JE. Fruit and vegetable intake and risk of cardiovascular disease: the Women's Health Study (with discussion). *American Journal of Clinical Nutrition* 2000; 72: 922-8.
135. Hauser SL, Oksenberg JR, Lincoln R, Garovoy J, Beck RW, Cole SR, Moke PS, Kip KE, Gal RL, and the Optic Neuritis Study Group. Interaction between HLA-DR2 and abnormal brain MRI in optic neuritis and early MS. *Neurology* 2000; 54: 1859-61.
136. Cole SR, Kawachi I, Sesso HD, Paffenbarger RS, Lee IM. Sense of exhaustion and coronary heart disease: A prospective study among alumni. *American Journal of Cardiology* 1999; 84; 12: 1401-5.
137. Cole SR. Simple bootstrap statistical inference using the SAS system. *Computer Methods and Programs in Biomedicine* 1999; 60: 79-82.
138. Cole SR. Assessment of differential item functioning in the Perceived Stress Scale-10. *Journal of Epidemiology and Community Health* 1999; 53: 319-20.

139. Schwartz S, Anderson WM, Cole SR, Cornoni-Huntley J, Hays JC, Blazer D. Insomnia and heart disease: A review of epidemiologic studies. *Journal of Psychosomatic Research* 1999; 47: 313-33.
140. Cole SR, Beck RW, Moke PS, Kaufman DI, Tourtellotte WW, for the Optic Neuritis Study Group. The predictive value of CSF oligoclonal banding for MS 5-years after optic neuritis. *Neurology* 1998; 51: 885-7.
141. Schwartz S, Cornoni-Huntley J, Cole SR, Hays JC, Blazer DG, Schocken DD. Are sleep complaints an independent risk factor for myocardial infarction? *Annals of Epidemiology* 1998; 8: 384-92.
142. Cole SR, Bryant CA, McDermott RJ, Sorrell C, Flynn M. Beliefs and mammography screening. *American Journal of Preventive Medicine* 1997; 13: 439-443.

#### Non-refereed Works

1. Nandi A, Cole SR Mehta SH. Three Authors Reply Re: Neighborhood poverty and injection cessation in a sample of injection drug users. *American Journal of Epidemiology* 2010; 172: 863-4.
2. Lash TL, Fox MP, Greenland S, Jurek AM, Hoggatt KJ, Cole SR, Maldonado G, Brooks D, Rothman KJ, Poole C. Re: Promoting healthy skepticism in the news: helping journalists get it right. *JNCI* 2010; 102: 829-30 PMID: 20421568
3. \*Howe CJ, Cole SR. Applying quantitative bias analysis to epidemiologic data (book review). *American Journal of Epidemiology* 2009; 170: 1316-7.
4. Lash TL, Cole SR. Immortal person-time in studies of cancer outcomes (letter). *Journal of Clinical Oncology* 2009; 27: 55-6. PMID: 19597013
5. Chu H, Cole SR. Sample size calculation using exact methods in diagnostic test studies (letter). *Journal of Clinical Epidemiology* 2007; 60: 1201-2.
6. Cole SR, Chu H. Re: "Confidence intervals for biomarker-based HIV incidence estimates and differences using prevalent data" (letter). *American Journal of Epidemiology* 2007; 166: 861-2.
7. \*Cain LE, Cole SR. Re: "Survival analysis for recurrent event data: an application to childhood infectious diseases" (letter). *Statistics in Medicine* 2006; 25: 1431-3.
8. Chu H, Cole SR. Bivariate meta-analysis of sensitivity and specificity with sparse data: a generalized linear mixed model approach. (letter). *Journal of Clinical Epidemiology* 2006; 59:1331-2.

9. The Editors (writing committee: Cole SR, Mehta S, and Szklo M). What happens to your manuscript: characteristics of papers published in volumes 163 and 164 of the American Journal of Epidemiology (editorial). American Journal of Epidemiology; 2006; 164: 1251-2.
10. Brown TT, Cole SR, Li X. Re: Comment on "Incidence of diabetes and pre-diabetes in the Multicenter AIDS Cohort Study" (letter). Archives of Internal Medicine 2005; 165: 2537.
11. The Editors (writing committee: Cole SR and Szklo M). What happens to your manuscript: characteristics of papers published in volumes 161 and 162 of the American Journal of Epidemiology (editorial). American Journal of Epidemiology 2005; 162: 1235-6.
12. Mulla ZD, Cole SR. Re: "Epidemiology of salmonellosis in California, 1990-1999: morbidity, mortality, and hospitalization costs" (letter). American Journal of Epidemiology 2004; 159: 104.
13. \*Choi T, Cole SR. A family of ordered logistic regression models fit by data expansion (letter). International Journal of Epidemiology 2004; 33: 1413.
14. \*Lopez-Gatell H, Cole SR. Epidemiologic Methods (book review). American Journal of Epidemiology 2004; 159:1106.
15. The Editors (writing committee: Cole SR and Szklo M). What happens to your manuscript: characteristics of papers published in volume 160 of the American Journal of Epidemiology (editorial). American Journal of Epidemiology 2004; 160: 1234-6.
16. Gange SJ, Cole SR. Epidemiologic analysis (book review). American Journal of Epidemiology 2002; 155; 485-6.
17. Cole SR. A reanalysis of data from "Regression models for ordinal responses" (letter). International Journal of Epidemiology 1999; 28: 805.
18. Cole SR, Blair RC. Overlapping confidence intervals (letter). Journal of the American Academy of Dermatology 1999; 41: 1051-2.
19. Cole SR. Methods in Observational Epidemiology (book review). American Journal of Preventive Medicine 1997; 13: 331.
20. Cole SR. Atheoretical science: A response to the poverty of Popperian epidemiology (letter). International Journal of Epidemiology 1996; 25: 899-900.

## Teaching Record



Courses at UNC

- 2009 – Epidemiologic Analysis of Time-to-Event Data EPID722  
Instructor  
~ 35 doctoral and masters students
- 2008 – Epidemiologic Analysis of Binary Data EPID718  
Guest Lecturer  
~ 50 doctoral and masters students

Courses at Johns Hopkins

- 2007 – 2008 Methodologic Challenges in Epidemiologic Research 340.754  
Instructor  
~ 60 doctoral and masters students
- 2002 – 2006 Cohort Studies: Design, Analysis and Applications 340.603  
Instructor  
~ 150 masters and doctoral students
- 2002 – Doctoral Seminars in Epidemiology 340.863  
Co-Instructor  
~ 25 doctoral students
- 2002 – Advanced Methods in Design/Analysis of Cohort Studies 340.728  
Guest Lecturer  
~ 18 doctoral and masters students

Courses Elsewhere

- 2005, 2007, 2009 Cohort Studies, Erasmus University Summer Program  
Instructor  
50 – 100 masters and doctoral students

Student and Fellows Advised – Please see Table on final pages of CV

Thesis Committee Membership (non-advisees)

- 2010 – (2011) Cindi Snider, Ph.D., Epidemiology
- 2010 – (2012) Yi Zhang, Ph.D., Biostatistics
- 2010 – (2012) Jeanine Matuszewski, Ph.D., Biostatistics
- 2009 – (2011) Sarah Radke, Ph.D., Epidemiology

- 2009 – (2011) Andrew Edmonds, Ph.D., Epidemiology  
Clinical progression and immunological effects of ART in HIV-infected children
- 2009 – 2010 Bingqing (Teresa) Zhou, Ph.D., Biostatistics
- 2009 – 2010 Bosny Pierre-Louis, Dr.PH, Biostatistics  
Application of novel statistical methods for biomarker selection to HIV infection
- 2008 – 2010 Kimberly Porter, Ph.D., Epidemiology  
Challenges in the treatment of Malaria
- 2008 – 2009 Marcel Yotebieng, Ph.D. Epidemiology  
Response to antiretroviral therapy in children in resource-poor settings
- 2006 – 2008 Konstantinos Tsilidis, Ph.D. Epidemiology  
The association of insulin resistance and inflammation with sporadic colorectal neoplasia: Risk mediated by colonic epithelial damage
- 2006 – 2008 Wei Wei Wang, Ph.D. Biostatistics
- 2006 – 2008 Georgiana Onicescu, Sc.M. Biostatistics
- 2005 – 2008 Yun Yin, Ph.D. Biostatistics
- 2004 – 2008 Justin Lessler, MS, Ph.D. Epidemiology  
Detection and characterization of influenza and respiratory syncytial virus in the hospital using a non-invasive test for infection
- 2004 – 2007 David S. Cohen, Ph.D. Biostatistics  
Causal inference with instrumental variables in discrete time to event and partial identification settings
- 2003 – 2007 Todd T. Brown, Ph.D. Clinical Investigation  
Glucose Dysregulation in HIV and its Potential Treatment with American Ginseng
- 2003 – 2007 Caroline Fichtenberg, Ph.D. Epidemiology  
Networks and neighborhoods: Multilevel determinants of STI risk
- 2003 – 2007 Kate Gilroy, Ph.D. Epidemiology  
Patterns of care seeking and treatment for sick children in Bougouni District, Mali

2003 – 2005	Jennifer Ryea, Sc.M. Biostatistics
2002 – 2006	Meghan McSorley, Ph.D. Epidemiology Insulin-like growth factors, sex hormones, C-reactive protein and ovarian cancer risk
2002 – 2005	Siobhan Sutcliffe, Ph.D. Epidemiology Sexually transmitted infections and prostatitis in the etiology of prostate cancer and benign prostatic hyperplasia
2001 – 2003	Clara Chen, Sc.M. Epidemiology
2000 – 2004	Jennifer Havens, Ph.D. Epidemiology The effect of antisocial personality disorder on drug treatment entry and subsequent needle exchange utilization among injection drug users from the Baltimore needle exchange program
2000 – 2004	Kyle Bernstein, Ph.D. Epidemiology Repeat gonorrhea infections as a surrogate for core transmission

## Grants

### Active

R01 AA-017594 (S. Cole, PI) NIH/NIAAA	09/30/09 – 08/31/11 \$196,499 (direct costs, current year)	4.2 calendar (30%)
<i>Structural models and direct and indirect effects of alcohol use on HIV infection</i>		
To use NIH-funded data sources to adapt, apply and refine novel analytic epidemiologic methods to characterize the relation, and estimate the impact, of alcohol intake and patterns on risk of infection with HIV.		
R01 CA-117841 (D. Richardson, PI) NIH/NCI	01/01/10 – 12/31/12 \$250,000 (direct costs, current year)	2.4 calendar (20%)
<i>Cohort analysis methods for occupational cancer studies</i>		
To accelerate the development and dissemination of innovative analytical tools to improve the analysis of occupational cohort studies of cancer. Role: Co-investigator		
R24 AI-067039 (M. Saag, PI) NIH/NIAID and NIH/NHLBI	09/01/08 – 08/31/11 \$2,978,000, direct costs, current year)	2.4 calendar (20%)
<i>CFAR Network of Integrated Clinical Systems (CNICS)</i>		
CNICS is a collaboration of NIH Center for AIDS Research HIV Clinical Cohorts with the overall objective to improve the clinical management and outcomes of HIV-infected individuals receiving primary HIV care. The Biostatistics and Epidemiology Core provides collaboration and analytic support to the CNICS.		

Role: Director of the Epidemiology and Biostatistics Core

R01 DA-030793 (D. Wohl, PI) 10/01/10 – 09/30/15 0.6 calendar (5%)  
NIDA/NIMH/NIAID \$1,862,432 (direct costs, year 1)

*RCT of an augmented test, treat, link, & retain model for NC and Texas prisoners*

To develop, implement, and test a novel intervention to maintain antiretroviral-mediated suppression of HIV replication following prison release for HIV transmission prevention. HIV-infected inmates in NC and TX will be enrolled in this randomized clinical trial.

Role: Biostatistician

R21 AI-087360 (M. Mugavero, PI) 12/01/09 - 11/30/11 0.3 calendar (2.5%)  
NIH/NIAID \$166,865 (direct costs, initial year)

*Viremia copy-years: measuring the effect of cumulative HIV burden on outcomes*

Use data from the NIH-funded CFAR Network of Integrated Clinical Systems (CNICS) to develop and refine a novel analytic measure of cumulative HIV burden, viremia copy-years, in treatment-naïve HIV-infected patients initiating antiretroviral therapy, and to evaluate the independent prognostic value of viremia copy-years beyond current viral load measures.

Role: Co-investigator

Pending

R21 EY-021478 (S. Cole, PI) 01/01/10 – 12/31/12 2.4 calendar (20%)  
NIH/NEI \$175,000 (direct costs, year 1)

*Structural models to untangle triggers of ocular/nonocular herpesvirus recurrence*

Estimate the association between purported triggers of ocular and genital HSV recurrence in the Herpetic Eye Disease Study using state-of-the-art statistical approaches to account for time varying confounding.

X02 DA-032504 (S. Cole, PI) 10/01/11 – 09/30/2016 7.2 calendar (60%)  
*Counterfactual Models to Estimate Drug Effects in Complex Observational HIV Data*  
Develop and apply sophisticated, yet practical quantitative methods to draw accurate inferences from complex observational data on drug use and HIV disease progression.

Completed

R03 AI-071763 (S. Cole, PI) 03/01/07 – 02/28/09 1.8 calendar (15%)  
NIH/NIAID \$50,000 (direct costs, last year)

*Structural models to bridge observational and randomized evidence: HAART and AIDS*

To use multiple data sources to develop a novel analytic method to correct age period observational analyses for information bias and provide a refined estimate of the average causal effect of HAART on time to AIDS or death.

U01 DK 66116-01 (A. Munoz, PI) 2003 – 2008 1.2 calendar (10%)  
NIH/NIDDK \$559,624 (direct costs, last year)

Kidney Disease in Children Data management and Analysis Center

Establish the Data Coordinating Center for a prospective study of kidney disease in children, including: management, analysis, interpretation, and presentation of data.

Role: Co-PI

U01 AI 35043 (L. Jacobson, PI)                      2000 – 2008                      3.6 calendar (30%)  
NIH/NIAID    \$1,350,445 (direct costs, last year)

*Center for the Coordination, Analysis and Management of MACS*

Provide an infrastructure to coordinate MACS-wide research; including data management, HIV-1 pathogenesis study design, analysis, and interpretation.

Role: Epidemiologist

U01 AI 42590 (S. Gange, PI)                      2000 – 2008                      3.6 calendar (30%)  
NIH/NIAID    \$890,606 (direct costs, last year)

*WIHS Data Management and Analysis Center*

Provide leadership in the design, analysis and presentation of WIHS-wide studies: and to develop novel biostatistical and epidemiological methodology applicable in HIV/AIDS.

Role: Epidemiologist

### **Professional Service**

University of North Carolina School of Public Health, Department of Epidemiology

2009                      Infectious diseases qualifying examination committee  
2008 –                      Graduate studies committee

University of North Carolina

2010 –                      CFAR Administrative core internal advisory board  
2009 –                      CFAR Biostatistics core internal advisory board

Johns Hopkins Bloomberg School of Public Health, Department of Epidemiology

2007                      Qualifying exam committee  
2003 – 2006              Ad hoc committee to review core curriculum  
2001 – 2008              Curriculum committee

Johns Hopkins Bloomberg School of Public Health

2005 – 2008              Committee on academic standards

National/International

Grant Reviews

2010                      Netherlands Organisation for Health Research and Development  
2010                      NIH CSR ZRG1 AIDS and AIDS Related Research IRG

2010 National Medical Research Council (Singapore)  
2009 NIH CSR MBPP/Cell Biology IRG, Ad hoc reviewer  
2009 National Medical Research Council (Singapore)  
2009 US Department of Veterans' Affairs, Epidemiology study section  
2007 NIH SRG Special Emphasis Panel, ZRG1 AARR-D  
2004 NIH NICHD Intramural Grant Review, Ad hoc reviewer  
2003 NIH DSR NICHD Special Emphasis Panel IRG, Ad hoc reviewer  
2001 NIH CSR Prevention and Health Behavior IRG, Ad hoc reviewer

#### Advisory Board Membership

2010 Institute of Medicine Panelist on the NIH GuLF Study  
2010 – European Observational Study of Scleroderma

#### Editorial Board Memberships

2007 – Editorial Board, Epidemiology  
2006 – Associate Editor, American Journal of Epidemiology  
2001 – 2006 Associate Editor-in-Residence, American Journal of Epidemiology

#### Peer Review Activities

AIDS, 2006, 2005, 2002  
American Journal of Epidemiology, 2009 – 2000  
Annals of Internal Medicine, 2006  
Antiviral Therapy, 2010, 2009  
Archives of General Psychiatry, 2010  
Biometrical Journal, 2007  
Biometrics, 2010, 2009, 2007  
Biometrika, 2009  
Biostatistics, 2010, 2006  
BMC Medical Research Methodology, 2009  
Clinical Infectious Disease, 2007  
Clinical Trials, 2010, 2009, 2005  
Communications in Statistics: Theory and Methods, 2008  
Computational Statistics and Data Analysis, 2005  
Computer Methods and Programs in Biomedicine, 2006, 2005  
Controlled/Contemporary Clinical Trials, 2001  
Epidemiology, 2010 – 2005, 2003  
European Journal of Epidemiology, 2007  
Eye, 2006  
Genetics, 2006  
Health Services and Outcomes Research Methodology, 2009  
International Journal of Biostatistics, 2010  
International Journal of Epidemiology, 2009, 2007, 2006, 2004, 2002, 2001  
International Journal of Obesity, 2006

Journal of Acquired Immune Deficiency Syndromes, 2010, 2008, 2006 – 2002  
Journal of Applied Statistics, 2010  
Journal of Clinical Epidemiology, 2007, 2006  
Journal of Epidemiology and Community Health, 2007, 2006, 2002, 2000  
Journal of Rheumatology, 2008  
Journal of the Royal Statistical Society C, 2009  
Medical Care, 2008  
New England Journal of Medicine, 2011, 2010  
Ophthalmology, 2008 – 2000  
Paediatric and Perinatal Epidemiology, 2008  
Pharmacoepidemiology and Drug Safety, 2010  
PLoS Medicine, 2010  
Statistics and Probability Letters, 2010  
Statistics in Medicine, 2010 – 2004, 2002

#### Invited Oral Presentations

- 2011                      University of Minnesota School of Public Health, “Marginal structural model analysis of case-cohort study designs”
- Centre de Recherches Mathématiques Workshop on Analysis of Survival and Event History Data, “Marginal structural model analysis of case-cohort study designs”
- 2010                      Harvard School of Public Health, “Marginal structural model analysis of case-cohort study designs”
- US Institute of Medicine, “Discussion of the GuLF Worker Study protocol”
- International Society for Pharmacoepidemiology, “Advanced Topics in Pharmacoepidemiology: Marginal structural models”
- NIMH/NIDA Prevention Science and Methodology Group Webinar, “Marginal structural models”
- 2009                      International Workshop on Causal Modeling at the Norwegian Academy of Science and Letters, “Marginal structural measurement-error models”
- Methods Workshop for Society for Perinatal and Pediatric Epidemiologic Research, “Marginal structural models”

- 2008                   UNC Division of Infectious Diseases, “When to start HIV therapies”
- McGill University, “Marginal structural measurement-error models: Antiretroviral therapy and incident AIDS or death”
- NCI/NIH Cohorts Consortium meeting, “When to Initiate Anti-HIV Therapies: A collaborative analysis of 15 cohort studies”
- HIV Outpatient Prospective Study (HOPS) annual Investigators’ Meeting, “Estimation of causal effects using structural models”
- 2007                   Boston University School of Public Health, “Effect of HAART on changes in HIV viral load: Marginal structural models for left-censored biomarkers”
- NICHD/NIH, “Marginal structural models and causal inference”
- University of Michigan School of Public Health, “Effect of HAART on changes in HIV viral load: Marginal structural models for left-censored biomarkers”
- 2006                   University of Pennsylvania Causal Modeling Conference, “Effect of HAART on changes in HIV viral load: Marginal structural models for left-censored biomarkers”
- University of North Carolina Chapel Hill School of Public Health, “Effect of HAART on changes in HIV viral load: Marginal structural models for left-censored biomarkers”
- GlaxoSmithKline Worldwide Epidemiology, “Marginal structural models and causal inference”
- Emory University, “Effect of HAART on changes in HIV viral load: Marginal structural models for left-censored biomarkers”
- NIAID/NIH, “Accounting for leadtime in cohort studies: Evaluating when to initiate HIV therapies”
- 2005                   University of Alabama Birmingham School of Public Health, “Multiple imputation for measurement error correction”
- 2003                   Yale University School of Public Health, “Accounting for leadtime in cohort studies: Evaluating when to initiate HIV therapies”
- 2001                   University of Maryland School of Medicine, “Marginal structural models and causal inference”



2000 Johns Hopkins University School of Public Health  
 University of South Florida Moffitt Cancer Center  
 University of Florida School of Medicine  
 University of Pennsylvania School of Medicine  
 NEI/NIH

1999 Harvard Medical School

Society for Epidemiologic Research

1995 – Member  
 2001 – Methods abstract reviewer  
 2002 Spotlight session on topics in causal inference  
 2003, 2004, 2008 Poster judge  
 2005 Student research workshop faculty  
 2005, 2007, 2008 Breakfast with experts  
 2008 Spotlight session (w/ Charles Poole) on hypermodern methods  
 2009 Spotlight session on measurement bias  
 2009 Lillienfeld prize judge  
 2009 Student Caucus luncheon panel  
 2009 SPER advanced methods workshop  
 2009 Symposium, Past, present, and future of the healthy worker effect  
 2010 Symposium, Rethinking randomized trials in HIV research  
 2010 Symposium, Unnatural selection: the survival of the fittest  
 2011 Spotlight session on time-varying confounding with non-positivity

American Statistical Association

2000 – Member  
 2001 Session chair at the NCI/NIH causal inference conference  
 2002 Invitee AMS-IMS-ASA conference on longitudinal data analysis  
 2009 Organizer and Moderator for session at JSM on extending marginal structural models  
 2009 Section on Statistics in Epidemiology Young Investigator and Graduate Student Awards Committee

**Current Trainees Table**

<b>Name</b>	<b>Training Position</b>	<b>Training Period</b>	<b>Prior Academic Degree, Institution (year)</b>	<b>Training Project</b>	<b>Funding Mechanism (current), Current Position (former)</b>
Howe, Chanelle	Postdoctoral	6/09 –	PhD, Johns Hopkins U (2009)	Structural models for estimation of joint and direct/indirect effects	R01AA017594
Gill, Karminder	Postdoctoral	12/10 –	Ph.D. UNC (2010)	Cohort analysis methods for occupational cancer studies	R01CA117841
Sander, Petra	Doctoral	8/08 –	AB, Princeton U	Alcohol consumption and HIV acquisition	R01AA017594
Ludema, Christina	Doctoral	6/10 –	BS	TBN	NA
Naimi, Ashley	Doctoral	1/10 –	MS, U Montreal	TBN	R01CA117841
Belenky, Nadya	Doctoral	8/09 –	BS, Stanford	TBN	NA

**Former Trainees Table**

<b>Name</b>	<b>Training Position</b>	<b>Training Period</b>	<b>Prior Academic Degree, Institution (year)</b>	<b>Training Project</b>	<b>Funding Mechanism (current), Current Position (former)</b>
Gill, Karminder	Doctoral	6/08 – 12/10	BS, MSPH	Hip pads and hip fractures: revisiting randomized evidence	NA
Westreich, Daniel	Postdoctoral	6/08 – 9/10	PhD, UNC-Chapel Hill (2008)	Methods for epidemiologic inference	Assistant Professor, Duke Medical School
Shiels, Meredith	Doctoral	7/06 – 6/09	BS, Penn State U	Ascertainment and incidence of AIDS-defining and non-AIDS-defining cancers in a population of HIV-infected men	Postdoctoral fellow, NCI
Cain, Lauren	Doctoral	7/03 – 6/08	AB, Princeton U	Effect of HAART on repeated AIDS-defining illnesses: Structural models to bridge observational and randomized evidence: HAART and AIDS	Postdoctoral fellow, Harvard School of Public Health
Nawar, Eric	Masters	7/02 – 6/04	BS	Homosexual sexual activity and Kaposi's sarcoma among HIV-1 and HHV-8 co-infected men	Elizabeth Glaser Pediatric Aids Fund
Lopez-Gatell, Hugo	Doctoral	7/03 – 6/07	MD, Autonomous University of Mexico	Effect of tuberculosis on HIV progression	Director General for Epidemiology, Mexican Ministry of Health
Choi, Tou	Masters	7/01 – 6/03	MBBS	Estimation of ordered odds ratios by data expansion	Research Assistant, Fred Hutchinson Cancer Research Institute