Curriculum Vitae

Lynn E. Eberly, Ph.D.

Associate Professor Division of Biostatistics School of Public Health University of Minnesota 420 Delaware St. SE, MMC 303 Minneapolis, MN 55455 USA Voice (1)612.624.1436 Fax (1)612.626.0660 Email lynn@biostat.umn.edu

Education

Ph.D. (Statistics), Cornell University, August 1997.

Thesis title: "Convergence of Interval Estimates From the Gibbs Sampler"

Thesis advisor: Professor George Casella

M.S. (Statistics), Cornell University, May 1994.

Thesis title: "Estimating the Number of Unseen Studies In a Meta-Analys is"

Thesis advisor: Professor George Casella

B.A. (Mathematics/German Language and Literature), Washington University in St. Louis, May 1991.

Experience

Associate Professor, Division of Biostatistics, School of Public Health, University of Minnesota, June 2004–Present.

Visiting Scholar, Department of Biostatistics, School of Public Health, Johns Hopkins University, August 2006–July 2007.

Assistant Professor, Division of Biostatistics, School of Public Health, University of Minnesota, August 1997–May 2004.

Instructor, Biometrics Unit, Cornell University, Summers 1994, 1995. Summer Intern, Mathematics Department, General Motors Research Laboratory, Summer 1992.

Member of the Data Sciences Graduate Faculty, January 2014–Present. Member of the Clinical Research Graduate Faculty, May 2010–Present. Member of the Biostatistics Graduate Faculty, September 1997–Present.

Awards and Honors Fellow of the American Statistical Association, 2014.

American Statistical Association Chapter Recognition Award, Twin Cities Chapter, 2004.

Leonard M. Schuman Excellence in Teaching Award, School of Public Health, University of Minnesota, 2002.

Delta Omega, inducted 1999.

Teaching Assistant of the Year Award, Biometrics Unit, Cornell University, 1997.

Phi Beta Kappa, inducted 1990.

Last updated: May 4, 2015.

Research and Scholarship

My area of expertise is methods for and applications to medical imaging data and other types of correlated data: multi-voxel images, longitudinal data, and clustered data. I am heavily involved in collaborative research with other faculty in Public Health, Medicine, Pharmacy, Nursing, and the College of Biological Sciences. My statistical research with my students is largely in the area of methods for imaging data (MR spectroscopy, MRI, fMRI, etc.). My recent collaborative research has been in neurodegenerative disease, endocrinology, psychiatry, geriatric epidemiology, cancer, and pharmacology. My collaborative work allows me to learn about wide ranging areas of science, which is what drew me to statistics many years ago.

Published Articles

- 1. Ohman PA and **Eberly LE** (1998). "Relating Sick Building symptoms to environmental conditions and worker characteristics," *Indoor Air*, **8**:172-179.
- 2. **Eberly LE** and Casella G (1999). "Bayesian estimation of the number of unseen studies in a meta-analysis," *Journal of Official Statistics*, **15**:477-494.
- 3. **Eberly LE**, Ohman PA, Neaton JD, Price RW, and Abrams DI (2000). "Kaposi's sarcoma and CNS disease: a real association or an artifact of the control group?," *AIDS*, **14**(8):995-1000.
- 4. **Eberly LE** and Carlin BP (2000). "Identifiability and convergence issues for Markov chain Monte Carlo Fitting of Spatial Models," *Statistics in Medicine*, **19**(17-18):2279-2294.
- 5. Packer C, Collins DA, and **Eberly LE** (2000). "Problems with primate sex ratios," *Philosophical Transactions of the Royal Society of London Series B*, **355**(1403):1627-1635.
- 6. Adgate JL, Barr DB, Clayton CA, **Eberly LE**, Freeman NCG, Lioy PJ, Needham LL, Pellizzari ED, Quackenboss JJ, Roy A, and Sexton K (2001). "Measurement of Children's Exposure to Pesticides: Analysis of Urinary Metabolite Levels in a Probability Based Sample," *Environmental Health Perspectives*, **109**(6):583-590.
- 7. Packer C, Pusey A, and **Eberly LE** (2001). "Egalitarianism in female African lions," *Science*, **293**(5530):690-693.
- 8. Sexton K, Adgate JL, **Eberly LE**, Clayton CA, Whitmore RW, Pellizzari ED, Lioy PJ, and Quackenboss JJ (2003). "Predicting children's short-term exposure to pesticides: Results of a questionnaire screening approach," *Environmental Health Perspectives*, **111**(1):123-128.
- 9. **Eberly LE** and Casella G (2003). "Estimating Bayesian credible intervals," *Journal of Statistical Planning and Inference*, **112**:115-132.
- 10. **Eberly LE**, Stamler J, and Neaton JD (2003). "Relation of triglycerides, fasting and non-fasting, to coronary heart disease mortality," *Archives of Internal Medicine*, **163**(9):1077-1083.
- 11. Garrard J, Harms S, Hardie N, **Eberly LE**, Nitz N, Bland P, Gross CR, and Leppik IE (2003). "Antiepileptic drug use in nursing home admissions," *Annals of Neurology*, **54**(1):75-85.
- † Biostatistics pre-doctoral mentee; ‡ Clinical post-doctoral mentee; § Supervised staff statistician

- 12. **Eberly LE**, Cohen JD, Prineas R, and †Yang L (2003). "The impact of incident diabetes mellitus and incident non-fatal cardiovascular disease on 18 year mortality: The Multiple Risk Factor Intervention Trial experience," *Diabetes Care*, **26**(3):848-854.
- 13. **Eberly LE**, Ockene J, Sherwin R, †Yang L, and Kuller L (2003). "Pulmonary function as a predictor of lung cancer mortality in continuing cigarette smokers and in quitters," *International Journal of Epidemiology*, **32**(4):592-599.
- Garrard J, Harms S, Eberly LE, and Matiak A (2003). "Variations in product choices of frequently purchased herbs: Caveat Emptor," Archives of Internal Medicine, 163(19):2290-2295.
- 15. **Eberly LE** and Louis TA (2004). "Bayes/frequentist compromise decision rules," *Journal of Statistical Planning and Inference*, **121**(2):191-207.
- 16. Adgate JL, **Eberly LE**, Stroebel C, Pellizzari ED, and Sexton K (2004). "Personal, indoor, and outdoor VOC exposures in a probability sample of children." *Journal of Exposure Analysis and Environmental Epidemiology*, **14**(Suppl.1):S4-S13.
- 17. Lonsdorf EV, **Eberly LE**, and Pusey A (2004). "Sex differences in development of a tool-use skill in wild chimpanzees," *Nature*, **428**(6984):715-716.
- 18. **Eberly LE**, Neaton JD, §Thomas AJ, and †Dai Y (2004). "Screening and mortality in the MRFIT," Clinical Trials: Journal of the Society for Clinical Trials, 1(2):148-161.
- 19. **Eberly LE** (2004). "Consequences of event rate heterogeneity across non-randomized study sub-groups," *Statistics in Medicine*, **23**(13):2023-2036.
- 20. Vaccaro O, Eberly LE, Neaton JD, †Yang L, Riccardi G, and Stamler J (2004). "Impact of Diabetes and previous myocardial infarction on long-term survival: 18 years mortality follow-up of primary screenees on the Multiple Risk Factor Intervention Trial," Archives of Internal Medicine, 164(13):1438-1443.
- 21. Patterson JM, **Eberly LE**, Ding M, Hargreaves M (2004). "Associations of smoking prevalence with individual and area characteristics: social capital and social support," *Journal of Epidemiology and Community Health*, **58**(8):692-697.
- *22. Wall MM, †Dai Y, and **Eberly LE** (2005). "GEE estimation of a mis-specified time-varying covariate in Poisson regression with many observations," *Statistics in Medicine*, **24**(6):925-39.
- *23. Fossler SP, Wells SJ, Kaneene JB, Ruegg PL, Warnick LD, **Eberly LE**, Godden SM, Halbert LW, Campbell AM, Bolin CA, Geiger Zwald AM (2005). "Cattle and environmental sample-level factors associated with presence of Salmonella in a multi-state study of conventional and organic dairy farms," *Preventive Veterinary Medicine*, **67**(1):39-53.
- *24. Gump BB, Matthews KA, **Eberly LE**, and Chang Y-F (2005). "Depression and mortality: Results from the Multiple Risk Factor Intervention Trial," *Stroke*, **36**(1):98-102.
- *25. §Thomas AJ, **Eberly LE**, Davey Smith G, Neaton JD, and Stamler J (2005). "Race/Ethnicity, Income, Major Risk Factors and CVD Mortality," *American Journal of Public Health*, 95(8): 1417-1423.

- *26. Harms S, **Eberly LE**, Garrard JM, Hardie NA, Bland PC, and Leppik IE (2005). "Prevalence of appropriate and problematic antiepileptic combination therapy in older people in the nursing home," *Journal of the American Geriatrics Society*, **53**(6):1023-1028.
- *27. Fossler CP, Wells SJ, Kaneene JB, Ruegg PL, Warnick LD, Bender JB, **Eberly LE**, Godden SM, and Halbert LW (2005). Herd-level factors associated with isolation of Salmonella in a multi-state study of conventional and organic dairy farms I. Salmonella shedding in cows. *Preventive Veterinary Medicine*, **70**(3-4):257-277.
- *28. Fossler CP, Wells SJ, Kaneene JB, Ruegg PL, Warnick LD, Bender JB, **Eberly LE**, Godden SM, and Halbert LW (2005). Herd-level factors associated with isolation of Salmonella in a multi-state study of conventional and organic dairy farms II. Salmonella shedding in calves. *Preventive Veterinary Medicine*, **70**(3-4):279-291.
- *29. §Thomas AJ, **Eberly LE**, Neaton JD, and Smith GD, for the Multiple Risk Factor Intervention Trial Research Group (2005). Latino Risk-adjusted Mortality in the Men Screened for the Multiple Risk Factor Intervention Trial. *American Journal of Epidemiology*, **162**(6):569-578.
- *30. §Thomas AJ, **Eberly LE**, Neaton JD, Smith GD, and Stamler J, for the Multiple Risk Factor Intervention Trial Research Group (2005). Race/Ethnicity, Income, Major Risk Factors, and Cardiovascular Disease Mortality. *American Journal of Public Health*, **95**(8):1417-1423.
- *31. **Eberly LE** and †Thackeray LM (2005). "Using Standard Tests of Normality with Lange and Ryan's Plotting Technique for Diagnosing Non-Normality of Random Effects," *Statistics and Probability Letters*, 75:77-85.
- *32. **Eberly LE**, Prineas R, Cohen JD, †Vazquez G, Zhi X, Neaton JD, and Kuller LH for the Multiple Risk Factor Intervention Trial Research Group (2006). "Metabolic Syndrome: Risk factor distribution and 18-year mortality in the Multiple Risk Factor Intervention Trial," *Diabetes Care*, 29(1):123-130.
- *33. Harms SL, Garrard J, Schwinghammer P, **Eberly LE**, †Chang Y, and Leppik IE (2006). "Ginkgo Biloba Use in Nursing Home Elderly with Epilepsy or Seizure Disorder," *Epilepsia*, 47(2):323-329.
- *34. Gilby IC, **Eberly LE**, and Pusey AE (2006). "Ecological and social influences on the hunting behaviour of chimpanzees (Pan troglodytes schweinfurthii)," *Animal Behaviour*, 72:169-180.
- *35. §Thomas AJ, **Eberly LE**, Davey Smith G, and Neaton JD (2006). "ZIP-code-based versus tract-based income measures as long-term risk-adjusted mortality predictors," *American Journal of Epidemiology*, 164(6): 586-90.
- *36. Murray, C M, **Eberly LE**, and Pusey, AE (2006). "Foraging strategies as a function of season and dominance rank among wild female chimpanzees (Pan troglodytes schweinfurthii)." *Behavioral Ecology*, 17: 1020-1028.
- *37. Sinner P, Folsom AR, Harnack L, **Eberly LE**, Schmitz KH (2006). "The association of physical activity with lung cancer incidence in a cohort of older women: The Iowa Women's Health Study," *Cancer Epidemiol Biomarkers Prev*, 15(12): 2359-2363.
- *38. Garrard JM, Harms S, **Eberly LE**, and Leppik I (2007). "Use of antiepileptic medications in nursing homes," *International Review of Neurobiology*, 81: 165-182.
- † Biostatistics pre-doctoral mentee; ‡ Clinical post-doctoral mentee; § Supervised staff statistician

- *39. Scher DP, Alexander BH, Adgate JL, **Eberly LE**, Mandel JS, Acquavella JF, Bartels MJ, and Brzak KA (2007). "Agreement of pesticide biomarkers between morning void and 24-hour urine samples from farmers and their children." *Journal of Exposure Science and Environmental Epidemiology*, 17(4): 350-357.
- *40. §Thomas AJ, **Eberly LE**, Neaton JD, and Davey Smith G (2007). "Census-based and personally reported income measures as long-term risk-adjusted mortality predictors." *Public Health*, 121(12): 898-901.
- *41. Cho SJ, Ramachandran G, Grengs J, Ryan AD, **Eberly LE**, Adgate JL (2008). "Longitudinal evaluations of allergen and culturable fungal concentrations in inner-city households," *Journal of Occupational and Environmental Hygiene*, **5**(2): 107-119.
- *42. Gilby IC, **Eberly LE**, and Wrangham R (2008). "Economic profitability of social predation among wild chimpanzees: individual variation promotes cooperation," *Animal Behaviour*, 75(2): 351-360.
- *43. Chen S, Wang C, **Eberly LE**, Caffo BS, Schwartz BS. "Adaptive Control of the False Discovery Rate in Voxel-Based Morphometry." *Human Brain Mapping*, 2009; 30(7): 2304-2311.
- *44. MacNulty D, Smith D, Mech LD, **Eberly LE**. "Body size and predatory performance in wolves: is bigger better?" *Journal of Animal Ecology*, 2009; 78(3): 532-539.
- *45. Wang J, Kane RL, **Eberly LE**, Virnig BA, Chang LH. "The effects of resident and nursing home characteristics on Activities of Daily Living." *Journals of Gerontology, Series A: Biological Science and Medical Science*, 2009; 64(4): 473-480.
- *46. Crum Cianflone C, **Eberly LE**, †Zhang Y, Ganesan A, Weintrob A, Marconi V, Barthel RV, Fraser S, Agan BK. "Is HIV becoming more virulent? Initial CD4 Cell Counts among HIV seroconverters during the course of the HIV epidemic: 1985-2007," *Clin Infect Dis*, 2009; 48: 1285-1292.
- *47. Iltis I, Koski D, **Eberly LE**, Nelson C, Deelchand D, Valette J, Ugurbil K, Lim KO, and Henry P-G. "Neurochemical changes in the rat prefrontal cortex following acute phencyclidine treatment: an in vivo localized ¹H MRS study," *NMR in Biomedicine*, 2009; 22(7): 737-744.
- *48. Öz G, Kumar A, Rao JP, Kodl CT, ‡Chow L, **Eberly LE**, and Seaquist ER. "Human brain glycogen metabolization during and following hypoglycemia," *Diabetes*, 2009; 58(9): 1978-1985.
- *49. Ghomrawi HMK, Kane RL, **Eberly LE**, Bershadsky B, and Saleh K. "Patterns of functional improvement after revision knee arthroplasty," *Journal of Bone and Joint Surgery*, Dec 2009 91(12): p. 2838.
- *50. Mosser A, Fryxell J, **Eberly LE**, and Packer C. "Serengeti real estate: a lion's eye view of the savanna landscape," *Ecology Letters*, 12(10): 1050-1060.
- *51. Ghomrawi HM, Kane RL, **Eberly LE**, Bershadsky B, Saleh KJ; North American Knee Arthroplasty Revision (NAKAR) Study Group. Patterns of functional improvement after revision knee arthroplasty. J Bone Joint Surg Am. 2009 Dec;91(12):2838-45. PubMed PMID: 19952245.
- † Biostatistics pre-doctoral mentee; ‡ Clinical post-doctoral mentee; § Supervised staff statistician

- *52. Murray C, Lonsdorf E, **Eberly LE**, Pusey A. "Reproductive Energetics in Free-living Female Chimpanzees (Pan troglodytes)," *Behavioral Ecology*, 20: 1211-1216.
- *53. Öz G, Nelson C, Koski D, Henry P-G, Marjanska M, Deelchand D, †Shanley R, **Eberly** L, Orr H, and Clark H. "Noninvasive detection of pre-symptomatic and progressive neurodegeneration in a mouse model of spinocerebellar ataxia type 1," *J Neuroscience*, 30(10): 3831-3838.
- *54. Crum-Cianflone NF, §Roediger M, **Eberly LE**, Headd M, Marconi V, Ganesan A, Weintrob AC, Barthel RV, Fraser S, Agan BK. "Increasing Rates of Obesity among HIV-Infected Persons during the Epidemic," *PLOS One* 2010, 5(4): e10106.
- *55. Forte ML, Virnig BA, Swiontkowski, Bhandari M, Feldman R, **Eberly LE**, Kane RL. "Ninety-day Mortality After Intertrochanteric Hip Fracture: Does Provider Volume Matter?" *Journal of Bone and Joint Surgery*, 2010; 92(4): 799-806.
- *56. Forte ML, Virnig BA, **Eberly LE**, Swiontkowski MF, Feldman F, Bhandari M, Kane RL. "Provider factors associated with intramedullary nail use for intertrochanteric hip fractures," *Journal of Bone and Joint Surgery*, 2010; 92(5): 1105-1114.
- *57. Ince NF, Gupte A, Wichmann T, Ashe J, Henry T, Bebler M, **Eberly L**, ‡Abosch A. "Selection of Optimal Programming Contacts Based on Local Field Potential Recordings from Subthalamic Nucleus in Patients with Parkinson's Disease," *Neurosurgery*, 1 Aug 2010; 67(2): 390.
- *58. Crum-Cianflone NF, §Roediger M, **Eberly LE**, Vyas K, Landrum ML, Ganesan A, Weintrob AC, Barthel RV, Agan BK. "Obesity among HIV-Infected Persons: Impact of Weight on CD4 Cell Count," 2010 Apr 24;24(7):1069-72. PubMed PMID: 20216300; PubMed Central PMCID: PMC2878190.
- *59. Crum-Cianflone NF, †Ren Q, **Eberly LE**, Ganesan A, Weintrob A, Marconi V, Barthel RV, Agan BK. Are HIV-positive persons progressing faster after diagnosis over the epidemic? J Acquir Immune Defic Syndr. 2010 Aug;54(4):e6-7. PubMed PMID: 20611033; PubMed Central PMCID: PMC2901894.
- *60. Öz G, Hutter D, Tkac I, Clark B, Gross M, Jiang H, **Eberly LE**, Bushara, Gomez CM. "Neurochemical alterations in Spinocerebellar Ataxia Type 1 and their correlation with clinical status," *Movement Disorders*, in press.
- *61. Zapor MJ, Barber M, Summers A, Miller G, Feeney L, **Eberly LE**, Wortmann G. "In vitro activity of the aminoglycoside antibiotic arbekacin against Acinetobacter baumannii-calcoaceticus isolated from war wounded at Walter Reed Army Medical Center," *Antimicrob Agents Chemother*, in press.
- *62. Crum-Cianflone NF, **Eberly L**, Duplessis C, Maguire J, Ganesan A, Faix D, Defang G, †Bai Y, §Iverson E, Lalani T, Whitman T, Blair PJ, Brandt C, Macalino G, and Burgess T. Immunogenicity of a Monovalent 2009 Influenza A (H1N1) Vaccine in an Immune Compromised Population: A Prospective Study Comparing HIV-Infected to HIV-Uninfected Adults, Clin Infect Dis. 2011 Jan 1;52(1):138-46. Epub 2010 Dec 7. PubMed PMID: 21148532; PubMed Central PMCID: PMC3060889.

- *63. Park JY, Ramachandran G, Raynor PC, **Eberly LE**, Olson G Jr. Comparing exposure zones by different exposure metrics using statistical parameters: contrast and precision. Ann Occup Hyg. 2010 Oct;54(7):799-812. Epub 2010 Jun 28. PubMed PMID: 20584861.
- *64. Ince NF, Gupte A, Wichmann T, Ashe J, Henry T, Bebler M, **Eberly L**, ‡Abosch A. Selection of optimal programming contacts based on local field potential recordings from subthalamic nucleus in patients with Parkinson's disease. Neurosurgery. 2010 Aug;67(2):390-7. PubMed PMID: 20644424.
- *65. Iltis I, Hutter D, Bushara KO, Clark HB, Gross M, **Eberly LE**, Gomez CM, Öz G. (1)H MR spectroscopy in Friedreich's ataxia and ataxia with oculomotor apraxia type 2. Brain Res. 2010 Oct 28;1358:200-10. Epub 2010 Aug 14. PubMed PMID: 20713024; PubMed Central PMCID: PMC2949538.
- *66. ‡Abosch A, Gupte A, **Eberly LE**, Tuite PJ, Nance M, Grant JE. Impulsive behavior and associated clinical variables in Parkinson's disease. Psychosomatics. 2011 Jan-Feb;52(1):41-7. PubMed PMID: 21300194; PubMed Central PMCID: PMC3073776.
- *67. Wang J, Chang LH, **Eberly LE**, Virnig BA, Kane RL. Cognition moderates the relationship between facility characteristics, personal impairments, and nursing home residents' activities of daily living. J Am Geriatr Soc. 2010 Dec;58(12):2275-83. doi: 10.1111/j.1532-5415.2010.03173.x. Epub 2010 Nov 18. Erratum in: J Am Geriatr Soc. 2011 Jan;59(1):188. PubMed PMID: 21087221.
- *68. **Eberly LE**, Telke SE. Statistical hypothesis testing: motivation and methods for the comparison of means between 2 patient samples. J Wound Ostomy Continence Nurs. 2011 Jan-Feb;38(1):18-20. PubMed PMID: 21233662.
- *69. Lifson AR, §Krantz EM, **Eberly LE**, Dolan MJ, Marconi VC, Weintrob AC, Crum-Cianflone NF, Ganesan A, Grambsch PL, Agan BK; Infectious Disease Clinical Research Program (IDCRP) HIV Working Group. Long-term CD4+ lymphocyte response following HAART initiation in a U.S. Military prospective cohort. AIDS Res Ther. 2011 Jan 18;8(1):2. PubMed PMID: 21244701; PubMed Central PMCID: PMC3037838.
- *70. Crum-Cianflone NF, §Iverson E, Defang G, Blair PJ, **Eberly LE**, Maguire J, Ganesan A, Faix D, Duplessis C, Lalani T, Whitman T, Brandt C, Macalino G, Millar EV, Burgess T. Durability of antibody responses after receipt of the monovalent 2009 pandemic influenza A (H1N1) vaccine among HIV-infected and HIV-uninfected adults. Vaccine. 2011 Apr 12;29(17):3183-91. Epub 2011 Mar 1. PubMed PMID: 21371580; PubMed Central PMCID: PMC3078993.
- *71. **Eberly LE**, Telke SE. Statistical hypothesis testing: comparison of means across multiple patient groups. J Wound Ostomy Continence Nurs. 2011 Mar-Apr;38(2):128-31. PubMed PMID: 21389825.
- *72. Chamberlain AM, Agarwal SK, Folsom AR, Duval S, Soliman EZ, Ambrose M, **Eberly LE**, Alonso A. Smoking and incidence of atrial fibrillation: results from the Atherosclerosis Risk in Communities (ARIC) study. Heart Rhythm. 2011 Aug;8(8):1160-6. Epub 2011 Mar 15. PubMed PMID: 21419237; PubMed Central PMCID: PMC3139831.
- *73. Crum-Cianflone NF, §Roediger M, **Eberly LE**, Ganesan A, Weintrob A, Johnson E, Agan BK; Infectious Disease Clinical Research Program HIV Working Group. Impact of weight on
- † Biostatistics pre-doctoral mentee; ‡ Clinical post-doctoral mentee; § Supervised staff statistician

- immune cell counts among HIV-infected persons. Clin Vaccine Immunol. 2011 Jun;18(6):940-6. Epub 2011 Apr 27. PubMed PMID: 21525303; PubMed Central PMCID: PMC3122603.
- *74. Telke SE, **Eberly LE**. Statistical hypothesis testing: correlating 2 numeric patient characteristics. J Wound Ostomy Continence Nurs. 2011 May-Jun;38(3):225-30. PubMed PMID: 21566487.
- *75. Telke SE, **Eberly LE**. Statistical hypothesis testing: determining agreement between tests and testers when measuring clinical conditions. J Wound Ostomy Continence Nurs. 2011 Jul-Aug;38(4):351-4. PubMed PMID: 21747255.
- *76. Telke SE, **Eberly LE**. Statistical hypothesis testing: associating patient characteristics with a prevalent or incident condition-relative risk, odds ratio, and logistic regression. J Wound Ostomy Continence Nurs. 2011 Sep-Oct;38(5):496-500. PubMed PMID: 21915013.
- *77. Öz G, Vollmers ML, Nelson CD, †Shanley R, **Eberly LE**, Orr HT, Clark HB. In vivo monitoring of recovery from neurodegeneration in conditional transgenic SCA1 mice. Exp Neurol. 2011 Dec;232(2):290-8. Epub 2011 Sep 22. PubMed PMID: 21963649; PubMed Central PMCID: PMC3221464.
- *78. Öz G, Tesfaye N, Kumar A, Deelchand DK, **Eberly LE**, Seaquist ER. Brain glycogen content and metabolism in subjects with type 1 diabetes and hypoglycemia unawareness. J Cereb Blood Flow Metab. 2012 Feb;32(2):256-63. doi: 10.1038/jcbfm.2011.138. Epub 2011 Oct 5. PubMed PMID: 21971353; PubMed Central PMCID: PMC3272603.
- *79. Telke SE, **Eberly LE**. Statistical hypothesis testing: associating patient characteristics with an incident condition: Kaplan-Meier curves, hazard ratios, and cox proportional hazards regression. J Wound Ostomy Continence Nurs. 2011 Nov-Dec;38(6):621-6. Review. PubMed PMID: 22101796.
- *80. Lifson AR, §Krantz EM, Grambsch PL, Macalino GE, Crum-Cianflone NF, Ganesan A, Okulicz JF, Eaton A, Powers JH, **Eberly LE**, Agan BK; the Infectious Disease Clinical Research Program HIV/STI Working Group. Clinical, demographic and laboratory parameters at HAART initiation associated with decreased post-HAART survival in a U.S. military prospective HIV cohort. AIDS Res Ther. 2012 Feb 10;9(1):4. PubMed PMID: 22339893; PubMed Central PMCID: PMC3320559.
- *81. Marjanska M, **Eberly LE**, Adriany G, Verdoliva SN, Garwood M, ‡Chow L. Influence of foot orientation on the appearance and quantification of (1) H magnetic resonance muscle spectra obtained from the soleus and the vastus lateralis. Magn Reson Med. 2012 Feb 1; 68(6):1731-1737. doi: 10.1002/mrm.24198. PubMed PMID: 22298295.
- *82. Crum-Cianflone NF, §Collins G, Defang G, §Iverson E, **Eberly LE**, Duplessis C, Maguire J, Ganesan A, Agan BK, Lalani T, Whitman T, Brandt C, Faix D, Blair PJ, Burgess T. Immunoglobulin G subclass levels and antibody responses to the 2009 influenza A (H1N1) monovalent vaccine among human immunodeficiency virus (HIV)-infected and HIV-uninfected adults. Clin Exp Immunol. 2012 Apr;168(1):135-41. doi: 10.1111/j.1365-2249.2011.04550.x. PubMed PMID: 22385248.
- *83. Crum-Cianflone NF, §Roediger MP, Moore DJ, Hale B, Weintrob A, Ganesan A, **Eberly LE**, Johnson E, Agan BK, Letendre S. Prevalence and Factors Associated With Sleep Disturbances
- † Biostatistics pre-doctoral mentee; ‡ Clinical post-doctoral mentee; § Supervised staff statistician

- Among Early-Treated HIV-Infected Persons. Clin Infect Dis. 2012 May;54(10):1485-94. Epub 2012 Mar 19. PubMed PMID: 22431801; PubMed Central PMCID: PMC3334363.
- *84. ‡Chow LS, Seaquist ER, **Eberly LE**, Mashek MT, Schimke JM, Nair KS, Mashek DG. Acute free fatty acid elevation eliminates endurance training effect on insulin sensitivity. J Clin Endocrinol Metab. 2012 Aug;97(8):2890-7. doi: 10.1210/jc.2012-1515. Epub 2012 May 25. PubMed PMID: 22639293; PubMed Central PMCID: PMC3410274.
- *85. Marino SE, Pakhomov SV, Han S, Anderson KL, Ding M, **Eberly LE**, Loring DW, Hawkins-Taylor C, Rarick JO, Leppik IE, Cibula JE, Birnbaum AK. The effect of topiramate plasma concentration on linguistic behavior, verbal recall and working memory. Epilepsy Behav. 2012 Jul;24(3):365-72. doi: 10.1016/j.yebeh.2012.04.120. Epub 2012 May 30. PubMed PMID: 22658432.
- *86. ‡A Abosch, D Lanctin, I Onaran, **L Eberly**, M Spaniol, and NF Ince. Long-term Recordings of Local Field Potentials from Implanted Deep Brain Stimulation Electrodes. Neurosurgery 2012 Oct; 71(4):804-814. PubMed PMID 22791039.
- *87. Stamler J, Neaton JD, Cohen JD, Cutler J, **Eberly L**, Grandits G, Kuller LH, Ockene J, Prineas R; The MRFIT Research Group. Multiple Risk Factor Intervention Trial Revisited: A New Perspective Based on Nonfatal and Fatal Composite Endpoints, Coronary and Cardiovascular, During the Trial. J Am Heart Assoc. 2012 Oct;1(5):e003640. Epub 2012 Oct 25. PubMed PMID: 23316301; PubMed Central PMCID: PMC3541632.
- *88. Moore DJ, §Roediger MJ, **Eberly LE**, Blackstone K, Hale B, Weintrob A, Ganesan A, Agan BK, Letendre SL, Crum-Cianflone NF. Identification of an abbreviated test battery for detection of HIV-associated neurocognitive impairment in an early-managed HIV-infected cohort. PLoS One. 2012;7(11):e47310. doi: 10.1371/journal.pone.0047310. Epub 2012 Nov 8. PubMed PMID: 23144815; PubMed Central PMCID: PMC3493574.
- *89. ‡Mangia S, Tesfaye N, De Martino F, Kumar AF, Kollasch P, ‡Moheet AA, **Eberly LE**, Seaquist ER. Hypoglycemia-induced increases in thalamic cerebral blood flow are blunted in subjects with type 1 diabetes and hypoglycemia unawareness. J Cereb Blood Flow Metab. 2012 Nov;32(11):2084-90. doi: 10.1038/jcbfm.2012.117. Epub 2012 Aug 15. PubMed PMID: 22892724; PubMed Central PMCID: PMC3494000.
- *90. ‡Chow LS, †Li S, **Eberly LE**, Seaquist ER, Eckfeldt JH, Hoogeveen RC, Couper DJ, Steffen LM, Pankow JS. Estimated plasma stearoyl co-A desaturase-1 activity and risk of incident diabetes: the Atherosclerosis Risk in Communities (ARIC) study. Metabolism. 2013 Jan;62(1):100-8. doi: 10.1016/j.metabol.2012.06.004. Epub 2012 Jul 21. PubMed PMID: 22819528; PubMed Central PMCID: PMC3518662.
- *91. Crum-Cianflone NF, Moore DJ, Letendre S, §Poehlman Roediger M, **Eberly L**, Weintrob A, Ganesan A, Johnson E, Del Rosario R, Agan BK, Hale BR. Low prevalence of neurocognitive impairment in early diagnosed and managed HIV-infected persons. Neurology. 2013 Jan 22;80(4):371-379. Epub 2013 Jan 9. PubMed PMID: 23303852.
- *92. ‡Moheet A, Emir UE, Terpstra M, Kumar A, **Eberly LE**, Seaquist ER, and Öz G. Initial experience with seven tesla magnetic resonance spectroscopy of hypothalamic GABA during hyperinsulinemic euglycemia and hypoglycemia in healthy humans. In press, Magn Resonance Med.
- † Biostatistics pre-doctoral mentee; ‡ Clinical post-doctoral mentee; § Supervised staff statistician

- *93. ‡Mangia S, Kumar A, ‡Moheet A, †Roberts R, **Eberly LE**, Seaquist E, Tkac I. Neurochemical profile of patients with type 1 diabetes measured by 1H-MRS at 4T. J Cerebral Blood Flow Metab. 2013; 33, 754 759. PMC3652707
- *94. Bliss DZ, Harms S, Garrard JM, †Cunanan K, Savik K, Gurvich O, Mueller, Wyman JF, **Eberly LE**, Virnig B. Prevalence of incontinence by race and ethnicity of older people admitted to nursing homes. Journal of the American Medical Directors Association. 2013; 14(6): 451.e1-451.e7.
- *95. **Eberly LE**, Hodges JS, Savik K, Gurvich O, Bliss DZ, Mueller C. Extending the PetersBelson approach for assessing disparities to right censored time-to-event outcomes. Statistics in Medicine. 2013; 32(23):4006-4020. PMID 23703882.
- *96. Emir UE, Clark BH, Vollmers ML, **Eberly LE**, Öz G. Non-invasive detection of neurochemical changes prior to overt pathology in a mouse model of spinocerebellar ataxia type 1. J Neurochem 2013 Dec; 127(5): 660-668. PMID 24032423.
- *97. Terpstra M, ‡Moheet A, Kumar A, **Eberly L**, Seaquist E, Öz G. Changes inhuman brain glutamate concentration during hypoglycemia: Insights into cerebral adaptations in hypoglycemia associated autonomic failure in type 1 diabetes. *Journal of Cerebral Blood Flow and Metabolism* 2014 May; 34(5): 876-882. PMID 24549182.
- *98. ‡Mangia S, ‡Carpenter A, Tyan A, **Eberly L**, Garwood M, Michaeli S. Magnetization transfer and adiabatic T1rho reveal abnormalities in normal appearing white matter of subjects with multiple sclerosis. *Multiple Sclerosis Journal* 2013 Dec 12; 20(8): 1066-1073. PMID 24336350.
- *99. Satzer D, Lanctin D, **Eberly L**, ‡Abosch A. Variation in Deep Brain Stimulation Electrode Impedance over Years Following Electrode Implantation. *Stereotactic and Functional Neurosurgery* 2014; 92(2): 94-102. PMID 24503709.
- too. ‡Moheet A, Kumar A, **Eberly LE**, †Kim J, †Roberts R and ER Seaquist. Hypoglycemia associated autonomic failure in healthy humans: Comparison of 2 vs 3 periods of hypoglycemia on hypoglycemia-induced counterregulatory and symptom response 5 days later. *Journal of Clinical Endocrinology and Metabolism* 2014 Feb; 99(2): 664-670. PMID 24423306.
- f01. Klimes-Dougan B, Eberly LE, Westlund MK, †Kurkiewicz P, Houri A, Schlesinger A, Thomas KM, Mueller BA, Lim KO, ‡Cullen KR (2014). Multilevel assessment of the neurobiological threat system in depressed adolescents: Interplay between the limbic system and HPA axis. Development and Psychopathology, Nov 26(4 Pt 2):1321-1335. PMID 25422964.
- f'02. ‡Cullen K, **Eberly LE**, Heller MD, Schlesinger A, Gold PW, Martinez PE, Klimes-Dougan B. Personality disorders in offspring of mothers with mood disorders: results from a longitudinal family study. *Psychiatry Research* 2014 Aug 30; 218(3):303-310. PMID 24844978.
- f'03. ‡Cullen KR, Westlund MK, Klimes-Dougan B, Mueller BA, Houri A, Eberly LE, Lim KO. Abnormal amygdala resting-state functional connectivity in adolescent depression. JAMA Psychiatry 2014 Oct; 71(10): 1138-1147. PMID 25133665.
- f'04. ‡Chow L, Mashek D, †Austin E, Eberly LE, Persson X-M, Mashek M, Seaquist E, Jensen M. Training status diverges muscle diaclyglycerol accumulation during free fatty acid elevation. Am J Physiol - Endocrinology and Metabolism, 2014 Jul; 307(1):E124-131. PMID 24844260.
- † Biostatistics pre-doctoral mentee; ‡ Clinical post-doctoral mentee; § Supervised staff statistician

- Prof. Blair CK, Kelly AS, Steinberger J, Eberly LE, Napurski C, Robien K, Neglia JP, Mulrooney DA, Ross JA (2014). Feasibility and preliminary efficacy of the effects of flavonoid-rich purple grape juice on the vascular health of childhood cancer survivors: a randomized controlled crossover trial. Pediatric Blood and Cancer, 2014 Dec 61(12):2290-2296.
- f'06. ‡Chow L, Eberly LE, †Austin E, Carnethon M, Bouchard C, Sternfeld B, Zhu N, Sidney S, Schreiner P. Fitness change effects on midlife metabolic outcomes: The CARDIA study. Medicine & Science in Sports & Exercise, 2015 May; 47(5):967-973. PMID 25160846.
- f'07. ‡Corum C; Benson J; Idiyatullin D; Snyder A; Snyder C; Hutter D; Everson L; **Eberly** L; Nelson M; and Garwood M. High Spatial and Temporal Resolution Breast DCE MRI with SWIFT (SWeep Imaging with Fourier Transformation): a pilot study. *Radiology*, Feb 274(2):540-547. PMID 25247405.
- f'08. Öz G, Kittelson E, Demirgöz D, Rainwater O, Eberly LE, Orr HT, Clark HB (2014). Assessing Recovery from Neurodegeneration in Spinocerebellar Ataxia 1: Comparison of in vivo Magnetic Resonance Spectroscopy with Motor Testing, Gene Expression and Histology, Neurobiology of Disease, Feb 74:158-166. PMID 25446943.
- Proposition of the control of the
- f*10. Levin FR, Mariani JJ, Specker S, Mooney M, Mahony A, Brooks DJ, Babb D, Whelan J, †Bai Y, **Eberly LE**, Nunes EV, Grabowski J (2015). Extended Release Mixed Amphetamine Salts for Comorbid Adult Attention-Deficit/Hyperactivity Disorder and Cocaine Use Disorder: A Randomized Clinical Trial. *JAMA Psychiatry*, in press. PMID 25887096.
- f11. Bliss DZ, Gurvich O, Savik K, **Eberly LE**, Harms S, and Wyman JF (2014). Racial and ethnic disparities in time to cure of incontinence present at nursing home admission. *J Health Disparities Research and Practice*, 7(3): 96-113.
- f*12. Bliss DZ, Gurvich O, Savik K, **Eberly LE**, Harms S, Mueller CA, Wyman JF, Garrard JM, Virnig B (2015). Are there racial-ethnic disparities in time to pressure ulcer development and pressure ulcer treatment in older adults after nursing home admission? *J Aging Health*, in press.
- f13. Harms S, Bliss DZ, Garrard JM, †Cunanan K, Savik K, Gurvich O, Mueller CA, Wyman JF, **Eberly LE**, Virnig B (2014). Prevalence of pressure ulcers by race and ethnicity for older people admitted to nursing homes. *J Gerontological Nursing*, 40(3): 20-26. PMID 23623144.
- f'14. Bednařík P, Tkac I, Giove F, DiNuzzo M, Deelchand DK, Emir UE, **Eberly LE**, ‡Mangia S. Neurochemical and BOLD responses during neuronal activation measured in the human visual cortex at 7 Tesla. *J Cereb Blood Flow Metab*, 2015 Mar 31;35:601-10. PMID: 25564236
- f¹15. Bednařík P, ‡Moheet A, Deelchand DK, Emir UE, **Eberly LE**, Bareš M, Seaquist ER, Öz G (2015). Feasibility and Reproducibility of Neurochemical Profile Quantification in the Human Hippocampus at 3T. In press, *NMR in Biomedicine*. PMID 25904240.
- f16. Bailey A, **Eberly LE**, Packer C. Pregnancy coloration reduces female conspecific aggression in the presence of maternal kin. Revised and re-submitted to *Animal Behaviour*.
- † Biostatistics pre-doctoral mentee; ‡ Clinical post-doctoral mentee; § Supervised staff statistician

f17. **Eberly LE**, †Cunanan K, Gurvich O, Savik K, Bliss DZ, Wyman JF (2015). Methods to assess racial and ethnic disparities in health for nursing research. Revised and re-submitted to *Research in Nursing and Health*.

Book Chapters

- * 1. Stamler J, Daviglus M, Garside DB, Greenland P, **Eberly LE**, †Yang L, and Neaton JD (2006). "Low risk cardiovascular status: Impact on cardiovascular mortality and longevity." In Lauer RM, Burns TL, Daniels SR (Editors), *Pediatric Prevention of Atherosclerotic Cardiovascular Disease*, London: Oxford University Press.
- * 2. **Eberly LE** (2007). "Correlation and Simple Linear Regression." Pp. 143-164 in Ambrosius WT (Editor), *Topics in Biostatistics*, New York: Humana Press.
- * 3. **Eberly LE** (2007). "Multiple Linear Regression." Pp. 165-188 in Ambrosius WT (Editor), *Topics in Biostatistics*, New York: Humana Press.
- * 4. **Eberly LE**, Stamler J, Kuller LH, Neaton JD (2008). Multiple Risk Factor Intervention Trial (MRFIT). In: Wiley Encyclopedia of Clinical Trials. D'Agostino RB, Sullivan L, Massaro J, Eds. Hoboken, NJ: John Wiley & Sons, Inc.
- * 5. B Caffo, D Bowman, **L Eberly**, and S Bassett. A Markov chain Monte Carlo based analysis of a multilevel model for functional MRI data. The Handbook of Markov Chain Monte Carlo edited by Steve Brooks, Andrew Gelman, Galin Jones, Xiao-Li Meng, 2009.

Other Peer-Reviewed Publications

- 1. **Eberly LE**, Grambsch P, and Connett JE (2001). "Comments on 'Understanding the shape of the hazard rate: A process point of view' by Aalen O.A. and Gjessing H.K.," *Statistical Science*, **16**:16-19.
- Adgate JL, Bollenbeck M, Eberly LE, Stroebel C, Pellizzari ED, and Sexton K (2002). "Residential VOC concentrations in a probability-based sample of households with children" from the 9th International Conference on Indoor Air Quality and Climate, Monterey, CA, 30 June - 5 July 2002, Indoor Air 2002 Proceedings, Volume 1: 203-209.
- 3. Prospective Studies Collaboration (2002). "Age-specific relevance of usual blood pressure to vascular disease mortality: a meta-analysis of one million adults in 61 prospective studies," *Lancet*, **360**:1903-1913.
- * 4. Prospective Studies Collaboration (2007). "Blood cholesterol and vascular mortality by age, sex, and blood pressure: a meta-analysis of individual data from 61 prospective studies with 55,000 vascular deaths," *Lancet*, **370**:1829-1839.

Non-Peer-Reviewed Articles

- 1. **Eberly LE** and Louis TA (1999). "Bayes / Frequentist Compromise Rules for Outlier Detection," *Bayesian Statistical Science Proceedings of the 1999 Joint Statistical Meetings*.
- † Biostatistics pre-doctoral mentee; ‡ Clinical post-doctoral mentee; § Supervised staff statistician

- 2. **Eberly LE** and Louis TA (2000). "Estimating Random Effects Based on Both Bayes and Frequentist Performance Measures in Clinical Trials," *Biopharmaceutical Proceedings of the 2000 Joint Statistical Meetings*.
- 3. **Eberly LE** and Grambsch P (2001). "Comparison of inverse Gaussian distributions with two-parameter Weibull, log normal, and gamma for modeling censored survival data," *Bio-pharmaceutical Proceedings of the 2001 Joint Statistical Meetings*.
- 4. **Eberly LE**, †Mullin C, and Grambsch P (2002). "Testing for non-proportional hazards in stratified models," *Biopharmaceutical Proceedings of the 2002 Joint Statistical Meetings*.
- 5. **Eberly LE** and †Thackeray LM (2003). "Diagnosing non-normality of random effects in General Linear Mixed Models: Can we distinguish between an incorrect mean model and an incorrect random effects model?" *Biometrics Proceedings of the 2003 Joint Statistical Meetings*.
- * 6. †Chang Y, **Eberly L**, Harms S, and Garrard J (2005). "Association between race/ethnicity and prevalence of epilepsy and antiepileptic drug treatment upon admission to the nursing home," ASA Proceedings of the 2005 Joint Statistical Meetings.

Presentations

Invited Conference Presentations

1. **Eberly, LE**, Kuller LH, Peng Y, Neaton JD, and Stamler J. "Dietary Patterns in Middle-Age and Longevity in the Multiple Risk Factor Intervention Trial (MRFIT)," invited talk presented by LE Eberly at the conference on *Nutrition and Quality Health Among Older Individuals: What Should We Recommend?* Center for Healthy Aging, Graduate School of Public Health, University of Pittsburgh, May 2006.

Other Conference Presentations

- 1. **Eberly LE** and Casella G. "Estimating the number of unseen studies in a meta-analysis: an application in lead exposure and IQ levels," oral presentation given by **LE Eberly** at the Joint Statistical Meetings, Chicago IL, August 4-8 1996.
- 2. **Eberly LE** and Casella G. "Constructing interval estimates from the Gibbs sampler," oral presentation given by **LE Eberly** at the Joint Statistical Meetings, Anaheim CA, August 10-14 1997.
 - **Eberly LE** and Casella G. "Interval estimates for cases of clinical mastitis using the Gibbs sampler," poster presentation given by **LE Eberly** at the Case Studies in Bayesian Statistics Workshop 4, September 26-27 1997, Pittsburgh PA.
- 3. **Eberly LE** and Casella G. "Convergence of interval estimates from the Gibbs sampler," poster presentation given by **LE Eberly** at the Young Researcher Poster Session, Statistics for Correlated Data: Iowa State 50th Anniversary Conference, Ames IA, October 16-18 1997.
- 4. **Eberly LE** and Casella G. "MCMC-generated Bayesian credible intervals in hierarchical models," oral presentation given by **LE Eberly** at the International Biometric Society Eastern North American Region 1998 Spring Meeting, Pittsburgh PA, March 29 April 1 1998.
- † Biostatistics pre-doctoral mentee; ‡ Clinical post-doctoral mentee; § Supervised staff statistician

- 5. **Eberly LE** and Casella G. "MCMC-generated Bayesian credible intervals in hierarchical models," poster presentation given by **LE Eberly** at the 6th Valencia International Meeting on Bayesian Statistics, May 29-June 4 1998, Alcossebre, Spain.
- 6. Eberly LE, Chen L, Hodges J, Huppler-Hullsiek K, and Louis TA. "Correlates of coenrollment," oral presentation given by LE Eberly at the International Biometric Society Eastern North American Region 1999 Spring Meeting, Atlanta GA, March 28-31 1999.
- Eberly LE and Louis TA. "Bayes / Frequentist Compromise Rules for Outlier Detection," oral presentation given by LE Eberly at the New Researchers Conference and the Joint Statistical Meetings, Baltimore, MD, August 4-7 1999.
- 8. **Eberly LE** and Carlin BP. "A spatial application in Bayesian learning and identifiability," poster presentation given by **LE Eberly** at the Case Studies in Bayesian Statistics Workshop 5, Pittsburgh PA, September 24-25 1999.
- 9. **Eberly LE** and Louis TA. "Estimating Random Effects Based on Both Bayes and Frequentist Performance Measures in Clinical Trials," oral presentation given by **LE Eberly** at the Joint Statistical Meetings, Indianapolis, IN, August 13-17 2000.
- 10. Eberly LE and Ohman PA. "Use of a shifted frailty distribution for modeling high incidence, highly repeatable events," poster presentation given by LE Eberly at the Second Seattle Symposium on Biostatistics: Analysis of Correlated Data, Seattle, WA, November 20-21 2000.
- 11. **Eberly LE** and Grambsch P. "Comparison of inverse Gaussian distributions with two-parameter Weibull, log normal, and gamma for modeling censored survival data," oral presentation given by **LE Eberly** at the Joint Statistical Meetings, Atlanta, GA, August 5-9 2001.
- 12. **Eberly LE**, †Mullin C, and Grambsch P. "Testing for non-proportional hazards in stratified models," oral presentation given by **LE Eberly** at the Joint Statistical Meetings, New York, NY, August 11-15 2002.
- 13. **Eberly LE** and †Yang L. "Adjusting for clinic effects when estimating a treatment effect: stratified, cluster, and frailty models," oral presentation given by **LE Eberly** at the 2003 Eastern North American Region Spring Meeting of the International Biometrics Society, Tampa, FL, March 30 2 April 2003.
- 14. **Eberly LE** and †Thackeray LM. "Diagnosing non-normality of random effects in General Linear Mixed Models: Can we distinguish between an incorrect mean model and an incorrect random effects model?" oral presentation given by **LE Eberly** at the 2003 Joint Statistical Meetings, San Francisco, CA, August 3-7 2003.
- *15. †Chang Y, **Eberly LE**, Harms SL, and Garrard JM. "Association of race/ethnicity with prevalence of epilepsy and its treatment with antiepileptic drugs in nursing home admissions," oral presentation given by Y Chang at the 2005 Joint Statistical Meetings, Minneapolis, MN, August 7-11 2005.
- *16. **Eberly LE** and Caffo BS. "FDR Thresholding in a Neuroimaging Context," oral presentation given by **LE Eberly** at the 2008 Eastern North American Region Spring Meeting of the International Biometrics Society, Arlington, VA, March 16 19 2008.
- † Biostatistics pre-doctoral mentee; ‡ Clinical post-doctoral mentee; § Supervised staff statistician

- *17. **Eberly LE** and Caffo BS. "Adapting FDR Thresholding Procedures to Neuroimaging," oral presentation given by **LE Eberly** at the 2008 Joint Statistical Meetings, Denver, CO, August 3 7 2008.
- *18. **Eberly LE**. "Diffusion Tensor Imaging in the Brain: Overview," oral Topic Contributed presentation given by **LE Eberly** at the 2009 Joint Statistical Meetings, Washington, DC, August 2 6 2009.
- *19. †Li S and **Eberly LE**. "Enhanced Global Error Rate Control in Neuroimaging Data," poster presentation given by S Li at the 2010 Eastern North American Region Spring Meeting of the International Biometrics Society, New Orleans, LA, March 21-24 2010.
- *20. **Eberly LE**, Hodges JS, Bliss DZ, Savik K, Gurvich O, Harms SL. "The Peters-Belson Method for Assessing Health Care Disparities, Extended to Survival Analysis," oral Contributed presentation given by JS Hodges at the 2011 Joint Statistical Meetings, Miami Beach, FL, July 30 August 4 2011.
- *21. †Li S and **Eberly LE**. "Empirical null distribution modeling for signal detection in fMRI," oral Contributed presentation given by S Li at the 2011 Joint Statistical Meetings, Miami Beach, FL, July 30 August 4 2011.
- *22. †Li S, **Eberly LE**, and Caffo BS. "Simple modifications of a t-test for improved power with FDR control in fMRI," oral presentation given by **L Eberly** at the 2012 Eastern North American Region Spring Meeting of the International Biometrics Society, Washington, DC, 30 March 2 April 2012.
- *23. †Musgrove D, **Eberly LE**, and ‡Cullen KR. "Effective Connectivity Modeling of Functional MRI using Dynamic Causal Modeling with Application to Depression in Adolescence," oral presentation given by D Musgrove at the 2013 Eastern North American Region Spring Meeting of the International Biometrics Society, Orlando, FL, 10 13 March 2013.
- *24. †Musgrove D, Hughes J, and **Eberly LE**. "Fast, fully Bayesian spatiotemporal inference for fMRI data," poster presentation given by D Musgrove at the 7th Annual Bayesian Biostatistics and Bioinformatics Meeting, Houston, TX, 12 14 February 2014.
- *25. †Musgrove D, Hughes J, and **Eberly LE**. "Fast, fully Bayesian spatiotemporal inference for fMRI data," poster presentation given by D Musgrove at the 2015 Eastern North American Region Spring Meeting of the International Biometrics Society, Miami, FL, 15 18 March 2015.

Invited Departmental Talks

- 1. Biometrics Unit Discussion Series, Cornell University, February 1996.
- 2. Department of Statistics Seminar, The Pennsylvania State University, February 1997.
- 3. Biometrics Unit Discussion Series, Cornell University, February 1997.
- 4. Department of Statistics and Applied Probability Seminar, University of California Santa Barbara, February 1997.
- † Biostatistics pre-doctoral mentee; ‡ Clinical post-doctoral mentee; § Supervised staff statistician

- 5. Department of Mathematics and Statistics Seminar, Western Michigan University, March 1997.
- 6. Department of Mathematics and Statistics Seminar, Winona State University, December 1998.
- 7. Department of Statistics Seminar, University of Minnesota, December 1998.
- 8. Department of Statistics Seminar, Iowa State University, April 1999.
- 9. Department of Statistics Seminar, University of Florida, May 1999.
- 10. Department of Statistics Biostatistics/Genetics Seminar, Purdue University, October 1999.
- 11. Department of Statistics Seminar, Carnegie Mellon University, April 2000.
- 12. Department of Mathematics and Computer Science, Carleton College, October 2001.
- 13. Department of Mathematics and Computer Science, Carleton College, October 2002.
- *14. Invited panelist at the PEW Midstates Science and Mathematics Consortium "Upper Level Statistics in the 21st Century: Linking Practice and Pedagogy," Northfield, MN, November 2003.
- *15. Department of Animal Science, University of Minnesota, October 2005.
- *16. Statistical Imaging Working Group, Department of Biostatistics, Johns Hopkins University, February 2007
- *17. Division of Epidemiology and Biostatistics, Department of Preventive Medicine and Biometrics, Uniformed Services University of the Health Sciences, March 2008
- *18. Biostatistics/Statistics Imaging Working Group, Division of Biostatistics, University of Minnesota, November 2014.

Research Grant Support

Current Support

- * 1. NIH/NINDS R01 salary support from Magnetic Resonance Spectroscopy Biomarkers of Neurodegeneration, P.I. Dr. Gulin Oz; **Dr. Lynn Eberly**, Co-Investigator, 8% effort, Sep 2010 Aug 2015.
- * 2. University of Minnesota Infrastructure Reinvestment Initiative (I3), P.I. Dr. Steven Engel; **Dr. Lynn Eberly**, Co-Investigator, no faculty support provided, Jul 2011 Jun 2016.
- * 3. NIH/NINDS R01 salary support from Measurement of Glucose Homeostasis in Human Brain by NMR, Multiple P.I.s Dr. Elizabeth Seaquist and Dr. Gulin Oz; **Dr. Lynn Eberly**, Co-Investigator, 10
- * 4. NIH/OWHR/NIDA Statistical Analysis Core for the P50 project Progesterone treatment for impulsivity, Nicotine and Cocaine Abuse: Sex Differences, **Core Principal Investigator Dr. Lynn Eberly**. P50 P.I. Dr. Marilyn Carroll. 12%, Aug 2012 Jul 2017.
- † Biostatistics pre-doctoral mentee; ‡ Clinical post-doctoral mentee; § Supervised staff statistician

- * 5. NIH/NINDS R01 salary support from Characterizing and Predicting Drug Effects on Cognition, P.I. Dr. Susan Marino; **Dr. Lynn Eberly**, Consultant, 5% effort, Apr 2012 May 2017.
- * 6. MN Partnership for Biotechnology and Medical Genomics. Salary support from Partnership for Early Detection of Alzheimer's Disease using Advanced MR Technology. P.I. Dr. Gulin Oz, Co-Investigator **Dr. Lynn Eberly**, 5% effort plus student funding, Feb 2013 Jan 2016.
- * 7. NIH P41 salary support from NMR Imaging and Spectroscopy Biotechnology Research Center (BTRC). P.I. Dr. Kamil Ugurbil, Statistician **Dr. Lynn Eberly**, 10%, Jun 2013 May 2018.
- * 8. Alzheimer's Association salary support from Automated Semantic Indices for Early Detection of Cognitive Changes. P.I. Dr. Serguei Pakhomov, Co-Investigator **Dr. Lynn Eberly**, 5%, Feb 2014 Sept 2015.
- * 9. NIH/NINDS R03 salary support from Functional MRS at 7T to Study Neuronal Inhibition in Humans. P.I. Dr. ‡Silvia Mangia, Co-Investigator **Dr. Lynn Eberly**, 5%, Jan 2014 Dec 2015.
- *10. NIH/NIDDK R01 salary support from Identifying the Brain Substrates of Hypoglycemia Unawareness in Type 1 Diabetes. P.I. Dr. ‡Silvia Mangia, Co-Investigator **Dr. Lynn Eberly**, 20%, Sep 2014 May 2019.
- *11. Juvenile Diabetes Research Foundation salary support from Use of N-Acetyl Cysteine for the Prevention and Treatment of HAAF. P.I. Dr. Elizabeth Seaquist, Co-Investigator **Dr. Lynn Eberly**, 8%, Sep 2014 Aug 2016.
- *12. Clearway MN salary support from Exercise to Promote Quit Attempts in Young Adults. P.I. Dr. ‡Alicia Allen, Co-Investigator **Dr. Lynn Eberly**, 1%, Jun 2015 Dec 2016.

Past Support

- 1. AHCPR salary support from the Patient Outcomes Associated with Antidepressant Drugs grant, P.I. Dr. Judy Garrard; **Dr. Lynn Eberly**, Statistician, 10-15% effort, July 1998 February 1999.
- 2. NIH/NIAID salary support from the Community Programs for Clinical Research on AIDS grant, P.I. Dr. James Neaton; **Dr. Lynn Eberly**, Senior Statistician, 20% effort, October 1997 March 2001.
- 3. EPA salary support from the Measuring and Apportioning Children's Exposures to Pesticides in Urban, Suburban, and Rural Communities grant, P.I. Dr. Ken Sexton; **Dr. Lynn Eberly**, Statistician, 5% effort, September 1999 July 2001.
- 4. NIH/NCI R01 salary support from the Effect of Minnesota State and Local Programs on Youth Tobacco Use grant, P.I. Dr. Jean Forster; **Dr. Lynn Eberly**, Co-Investigator, 10% effort, May 2000 April 2003.
- 5. University of Minnesota Grant-in-Aid of Research, Artistry, and Scholarship, Time to Exhaustion of Anti-HIV Drugs Through Multivariate Frailty Models, **Principal Investigator Dr. Lynn Eberly**; graduate student stipend and computing support, no faculty support provided, July 2000 December 2001.
- † Biostatistics pre-doctoral mentee; ‡ Clinical post-doctoral mentee; § Supervised staff statistician

- 6. NIH/NINDS salary support from the Pharmacoepidemiology of Antiepileptics grant and bridge funding, P50 P.I. Dr. Judith Garrard; **Dr. Lynn Eberly**, Co- Investigator, 10-15% effort, July 2000 August 2002.
- 7. Retirement Research Foundation salary support from the Medication Use by Residents of Assisted Living Facilities grant, P.I. Dr. Judith Garrard; **Dr. Lynn Eberly**, Co-Investigator, 10% effort, November 2000 September 2002.
- * 8. NIH/NHLBI R01 salary support from the MRFIT Long-term Mortality Follow-up grant, P.I. Dr. James Neaton; Co-Principal Investigator Dr. Lynn Eberly, 40% effort, January 2001 December 2005, 15% effort, January June 2006 (no cost extension).
- * 9. NIH/NINDS P50 salary support from the Epilepsy Clinical Research grant, P50 P.I. Dr. Ilo Leppik, Project P.I. Dr. Judith Garrard; **Dr. Lynn Eberly**, Co-Investigator, 15% effort, September 2002 August 2007.
- *10. NIH/NCI R01 salary support from the Statistical Methods in Cancer Control and Epidemiology (SMICCE) grant, P.I. Dr. Bradley Carlin; Co-Principal Investigator Dr. Lynn Eberly, 10% effort, August 2003 July 2005.
- *11. NIH R01 salary support from the MRS and MRI of Breast Cancer at Very High Magnetic Field grant, P.I. Dr. Michael Garwood; **Dr. Lynn Eberly**, Statistician, 8% effort, July 2006 March 2007.
- *12. Salary support from the NCI/Comprehensive Cancer Center, University of Minnesota, Biostatistics Core, Core P.I. Dr. Chap Le; **Dr. Lynn Eberly**, 10% effort, Jan 2007 May 2008.
- *13. Bob Allison Ataxia Research Center (BAARC) salary support from the Neurochemical Alterations in SCA1 Mouse Models and Patients by High Field Magnetic Resonance Spectroscopy grant, P.I. Dr. Gulin Oz; **Dr. Lynn Eberly**, Co-Investigator, 3% effort, Sept 2007 May 2008.
- *14. NIH/NCI R21 salary support: "Thermochemical ablation in image-guided interventions: Intital assessment," P.I. Dr. Erik Cressman; **Dr. Lynn Eberly**, Statistician, 2% effort, Apr 2008 Jan 2009.
- *15. NIH/NINR R01 salary support from the Informatics Based Nurse Triage in Lung Transplant Care grant, P.I. Dr. Stanley Finkelstein; **Dr. Lynn Eberly**, member of Data Safety and Monitoring Board, 1% effort, August 2005 May 2009.
- *16. Henry M. Jackson Foundation salary support from the Infectious Disease Clinical Research Program Data Analysis Center, P.I. Dr. Alan Lifson; **Co-Principal Investigator Dr. Lynn Eberly**, 25% effort, Sept 2007 May 2009.
- *17. Henry M. Jackson Foundation salary support from the Infectious Disease Clinical Research Program Data Analysis Center, **Principal Investigator Dr. Lynn Eberly**, 25% effort, June 2009 March 2012.
- *18. NIH/NCI R01 salary support from Quantitative MRS of the Human Breast, P.I. Dr. Patrick Bolan; **Dr. Lynn Eberly**, Co-Investigator, 5% effort, Apr 2007 Nov 2010.
- † Biostatistics pre-doctoral mentee; ‡ Clinical post-doctoral mentee; § Supervised staff statistician

- *19. NIH/NINDS R21 salary support from Neurochemical Correlates of Pathology in Spinocerebellar Ataxias, P.I. Dr. Gulin Oz; **Dr. Lynn Eberly**, Co-Investigator, 5% effort, July 2007 – June 2010.
- *20. NIH/NIA R01 salary support from Clinical Impact of Unstable AED Levels in Elderly Nursing Home Residents, P.I. Dr. Angela Birnbaum; **Dr. Lynn Eberly**, Co-Investigator, 10% effort, July 2007 June 2010.
- *21. NIH/NCI R21 salary support from the Improved Breast DCE MRI with SWIFT grant, P.I. ‡Dr. Curt Corum. **Dr. Eberly**, Co-Investigator, 5% effort, Sept 2009 Feb 2011.
- *22. Cooperative Agreement Funding from ASPH and CDC/Epilepsy Program: Incidence of epilepsy/seizure and outcomes in nursing homes: a 5 year cohort. **Principal Investigator Dr. Lynn Eberly**, 35% effort. June 2008 August 2011.
- *23. National Ataxia Foundation salary support from Magnetic Resonance Imaging and Spectroscopy of the Brain with Friedrich's Ataxia and Ataxia, P.I. Dr. Isabelle Iltis; **Dr. Lynn Eberly**, Co-Investigator, 2% effort, Jan 2011 Jun 2012.
- *24. American Diabetes Association salary support from the Hypoglycemia Unawareness in Patients with Type 1 Diabetes grant, P.I. Dr. Elizabeth Seaquist; **Dr. Lynn Eberly**, Co-Investigator, 5% effort, Jul 2009 Jun 2013.
- *25. Bob Allison Ataxia Research Foundation, salary support from Magnetic Resonance Spectroscopy of the Spinal Cord and Brain in Freidreich's Ataxia, P.I. Dr. Isabelle Iltis; **Dr. Lynn Eberly**, Co-Investigator, 5% effort, Jul 2012 Jun 2014.
- *26. NIH/NIDA R01 salary support from Extended-Release Mixed Amphetamine Salts for Adults with ADHD, P.I. Dr. John Grabowski; **Dr. Lynn Eberly**, Co-Investigator, 5% effort, Apr 2012 Aug 2014.
- *27. NIH/NIMH R21 salary support from Exploring the Neural Circuitry of Deliberate Self-Harm in Adolescents, P.I. ‡Dr. Kathryn Cullen; **Dr. Lynn Eberly**, Co-Investigator, 5% effort, Apr 2012 Dec 2014.
- *28. NIH/NINR R01 salary support from the Disparities in incontinence and perineal skin damages in nursing home elderly grant, P.I. Dr. Donna Bliss; **Dr. Eberly**, Co-Investigator, 5-15% effort, Sep 2009 May 2015.
- *29. University of Minnesota Academic Health Center Faculty Research Development Grant, Non-Suicidal Self Injury in Adolescents: Neural Circuitry before and after Treatment with N-Acetyl Cysteine. Multiple P.I.s Dr. Lynn Eberly and ‡Dr. Kathryn Cullen, graduate student and computing support, no faculty support provided, Jan 2012 Jun 2015.
- *30. FARA, salary support from Early and Longitudinal Assessment of Neurodegeneration in the Brain and Spinal Cord. P.I. Dr. P-G. Henry, Co-Investigator **Dr. Lynn Eberly**, 1%, May 2014 Apr 2015.

Teaching and Advising

Teaching

I have taught MS and PhD classes in Biostatistics, and introductory statistics classes for non-statistics students. I derive substantial enjoyment and personal satisfaction from my teaching, and I consistently receive very good to excellent reviews from student evaluations for all types of courses. I have been involved in in-person and on-line new course development.

Courses Taught

- * 1. Biostatistics I: Descriptive statistics. Gaussian probability models, point/interval estimation for means/proportions. Hypothesis testing, including t, chi-square, and nonparametric tests. Simple regression/correlation. ANOVA. Health science applications using output from statistical packages.
- * 2. Introduction to Clinical Trials: Participating either as a consumer, adviser, or contributor to evidence-based medical and public health decisions requires an understanding of the quality of that evidence. A strong foundation in clinical trials helps prepare scientists to evaluate published medical advances and to implement well-designed pioneering health research. The topics of this Introduction to Clinical Trials class follow the natural sequence in a protocol, and will include: hypotheses and endpoints, choice of intervention and control, ethical considerations, blinding and randomization, data collection and monitoring, sample size, analysis strategies, and writing of the protocol. Motivating examples from published research will be used throughout. All course interactions occur in an on-line environment. Weekly lessons on each topic have an audio lecture presentation, readings in texts and research literature, interactive discussion boards, video delivered by experts, and optional enrichment materials. Students will participate in discussion fora, homework, and exams, all delivered on-line. Graduate students will participate in clinical trial design through a full protocol development, and undergraduate students will participate in pilot clinical trial development and implementation via an interactive virtual population.
 - 3. Biostatistical Thinking: Guest lectures by Biostatistics Graduate Faculty and research staff in order to introduce students to potential Plan B or thesis advisors. Two writing projects.
- * 4. ANOVA and Experimental Design: Single factor ANOVA, diagnostics, classical non-parametrics, multifactor ANOVA, multiple comparisons, power and sample size determination, calculating expected mean squares, random/mixed effects models. ANOVA in regression notation. Randomized block designs, nested designs, repeated measures designs, cross-over designs. SAS and S-Plus used.
 - 5. Regression: T-tests, confidence intervals, power, type I/II errors. Exploratory data analysis. Simple linear regression, regression in matrix notation, multiple regression, diagnostics. Ordinary least squares, violations, generalized least squares, nonlinear least squares regression. Introduction to General linear Model. SAS and S-Plus used.
- * 6. Methods for Correlated Data: Correlated data arising from data collected over time or space, group randomizations, cluster sampling, nested designs, or random effects assumptions. Modeling, analysis, and interpretation appropriate for such data, for normally or non-normally (e.g. binary, Poisson, gamma) distributed outcomes. Computing using SAS software.

7. Advanced Longitudinal Data Analysis: Methods of inference for outcome variables measured repeatedly in time or space. Linear/nonlinear models with either normal or non-normal error structures. Random effects. Transitional/marginal models with biomedical applications.

Awards

Leonard M. Schuman Excellence in Teaching Award, School of Public Health, University of Minnesota, 2002.

Course Evaluations

Course Evaluations									* in
į		ı	Students	Students	Q_1	Q2	Q3	!	dica
Course Title		Terms	Enrolled	Responded	median	median	median	Notes	tes
6450 Biostatistics I	$\mathrm{MPH}/\mathrm{MS}/\mathrm{PhD}$ in	Fall 2007	71	22	5.6	6.4	5.3		ac
	allied health	Fall 2008	59	42	ಬ	9	ಬ	Ö	ctiv
	sciences	Fall 2009	73	61	ಬ	9	ಬ	Ö	riti
		Fall 2011	131	119	ಬ	9	ಬ	C,P50	es :
		Fall 2012	112	100	ಬ	9	9	C,P50	$\sin \epsilon$
7415 Introduction to	MPH/MS/PhD in	Spring 2011	18	13	ಬ	9	9	N,P50	ce j
Clinical Trials	allied health	Spring 2012	6	∞	ಬ	ಬ	9	P50	oro
	sciences	Summer 2014	12	7	9	9	9		mc
		Fall 2014	23	17	ಬ	9	9	P50	otic
		Summer 2015							n t
3415 Introduction to	Undergrads in	Summer 2014	4	2	4	9	5.5	Z	ю А
Clinical Trials	pre-med/pre-health	Fall 2014	6	9	4.5	ಬ	ಬ	P50	$\Lambda_{ m SS}$
		Summer 2015							oci
Biostatistical Thinking	Biostatistics MS	Fall 2001	32	26	5.8	6.3	4.4		ate
7406 ANOVA and Experimental	Biostatistics MS	Fall 1999	23	22	5.3	6.1	5.2		Pr
Design		Fall 2000	21	17	6.7	6.7	5.9	P33	ofe
		Spring 2003	28	27	0.9	0.9	5.8		essc
		Spring 2004	24	24	9.9	6.3	0.9		or.
		Spring 2005	28	24	6.7	6.4	5.9		
		Spring 2006	24	24	6.7	6.7	6.1		
7405 Regression	Biostatistics MS	Winter 1998	10	6	5.0	4.0	5.0	೦	
		Winter 1999	11	11	5.6	5.3	5.8	0	
7430 Methods for Correlated	Biostatistics MS,	Spring 2001	20		9.9	6.4	0.9	Z	
Data	other PhD	Spring 2002	6	6	7.0	0.9	0.9		
		Fall 2002	26	20	9.9	6.7	6.3		
		Fall 2003	30	24	6.3	6.3	6.1		
		Fall 2004	26	26	9.9	9.9	5.8		
		Fall 2005	39	26	9.9	6.5	5.8		
		Fall 2007	40	30	8.9	8.9	6.2		
Advanced Longitudinal	Biostatistics PhD	Spring Q 1999	11	11	5.3	5.6	4.3		:
Data Analysis		Spring 2000	9	ಬ	0.9	7.0	5.0		22

Policy Committee Chair for a public health core course exceptionally well taught; this is the only course in this list eligible for this Details on questions Q1 to Q3 are shown on the next page; in general, 1 is the lowest score and 6 (Fall 2008 or later) or 7 (prior to Fall 2008) is the highest score. Notes: C= commendation letter received from the School of Public Health Dean and the Educational commendation. N = new course developed. P33 = partial responsibility (33%); P50 = partial responsibility (50%). Q = quarter notsemester offering. Dr. Eberly had full responsibility for all courses not denoted with P. For Fall 2007 and earlier, questions were:

Q1: "How would you rate the instructor's overall teaching ability?"

Q2: "How would you rate the instructor's respect and concern for students?"

Q3: "How much would you say you learned in this course?"

All questions were answered on the scale 1=very poor, 2, 3, 4=satisfactory, 5, 6, 7=exceptional.

For Fall 2008 and later, questions were:

Q1: "How would you rate the instructor's overall teaching ability?"

Q2: "The instructor treated me with respect."

Q3: "I have a deeper understanding of the subject matter as a result of this course."

Q1 was answered on the scale 1=very poor, 2=poor, 3=satisfactory, 4=very good, 5=excellent, 6=exceptional. Q2 and Q3 were answered on the scale of 1=strongly disagree to 6=strongly agree.

Advising and Mentoring

Thesis and non-thesis pre-doctoral advising, and post-doctoral mentoring, are summarized in the tables below. I have been Co-Principal Investigator for a T32 training grant in Biostatistics for HIV-AIDS research. I typically have 2-3 academic advisees, and 2-3 thesis advisees, per year. In addition to these students, I typically fund Graduate Research Assistant positions for 1-2 other students.

I am the Biostatistics Mentor on several NIH K-award training grants for post-doctoral clinician researchers. All of these clinician researchers have sought out my participation because they are using medical imaging in their research.

I also supervise and mentor 1-4 junior Research Fellow MS statisticians.

Thesis Advising

11C	ates	${ m s}$ a	ctiv	/1t1	es sı	nc	ce j	oro	mc	otion t	O Ass	SOC	ate	P:	rofe	esso	or.										- 1
	Topic	The SAS/SaTScan Macro Accessory for Cartography (SMAC) Package	Bootstrap Confidence intervals for the variance components in a general linear mixed model	Bootstrap-based intervals for frailty models	Cause-specific mortality in relation to Body Mass Index among men from the Multiple Risk	Factor Intervention 17131	Reliability of breast cancer MRS biomarker concentration measurements	Epilepsy and its treatment in US nursing homes	Immortal time bias in epidemological observational studies	Comparison of Nonlinear Mixed Effect Model Fitting in SAS®and SPLUS®: NLMIXED vs. NLME Procedure	Estimating neighborhood effects in observational studies: comparison of regression models and propensity score matching	Methods for analysis of time-to-event data with time-varying covariates		False Discovery Rate Thresholding for fMRI	Epilepsy and Seizure Disorder Incidence in United States Nursing Homes	PedSeer: A set of computer programs for visualizing, modifying, and repairing pedigree data		Fast, fully Bayesian spatio-temporal modeling for fMRI data	Testing proportional hazards in stratified Cox regression models	Likelihood Ratio Test of Variance Components in General Linear Mixed Model comparing	group-specific random intercepts to group-specific random intercepts and slopes	Temporal analysis for the characterization of postural sway dynamics and	complexity in schizophrenia	Some Operating Characteristics of the Random Survival Forest Algorithm (Co-Advised,	Dr. Jim Hodges)	Evaluating the normality assumption of random effects in longitudinal models	Accounting for dropout in large clinical trials
Date of	completion	Nov 2005	Jul 2005	Jun 2004	$J_{\rm un} 2006$		Jul 2008	Aug 2004	in prog.	Aug 2006	Mar 2004	Jan 2003		Dec 2012	Sep 2011	May 2006			Jul 2001	Mar 2007		Sep 2012		Aug 2011	9000	Jun 2003	Jun 2005
\mathbf{Degree}	program	$\overline{\mathrm{MS}}$	$\overline{\mathrm{MS}}$	$\overline{\mathrm{MS}}$	MPH		$\overline{\mathrm{MS}}$	$\overline{ m MS}$	$\overline{\mathrm{MS}}$	$\overline{\mathrm{MS}}$	MS	$\overline{\mathrm{MS}}$	PhD	PhD	MPH	$\overline{\mathrm{MS}}$	PhD	PhD	$\overline{\mathrm{MS}}$	$\overline{\mathrm{MS}}$		$\overline{\mathrm{MS}}$		$\overline{\mathrm{MS}}$	5	MS	MS
	Advisee	Abrams, Allyson	An, Qian	Barin, Burc	Barry, Vaughn		Brearly, Ann	Chang, Yanping	Chen, Ning	Golden, Wen Adele	Huang, Reiping	Jones, Elizabeth	Kubisiak, Kristine	Li, Shuzhen	Lin, Li-Yu	Lind, Gregg	Lyu, Tianmeng	Musgrove, Donald	Mullin, Chris	Peng, Yi		Roberts, Rachel		Sheng, Xiaoyan	-	I nackeray, Lisa	Wang, Yinghui

Continued on next page.

Continued from previous page.

		MS May 2004 Conflicting conclusions from the Wald F-test and the likelihood ratio chi-square test	in linear mixed models with small sample sizes	Self-rated health and depression: a cross-sectional study of women in rural Nicaragua	Comparison of two diagnostic procedures, Cook's Distance and Conditional Cook's	Distance, in linear mixed models	Power and bias in adjusting for clinic effects: stratified, clustered, and frailty models	Prevalence of osteoporotic fracture and drug treatment for osteoporosis in the elderly	Frailty model selection with multiple frailties
	Date of	May 2004		Oct 2008	Jun 2005		Jun 2002	Nov 2004	Aug 2004
Date of completion May 2004 Oct 2008 Jun 2005 Jun 2002 Nov 2004 Aug 2004	Degree	MS		$\overline{\mathrm{MS}}$	$\overline{\mathrm{MS}}$		$\overline{\mathrm{MS}}$	$\overline{\mathrm{MS}}$	PhD
Degree Date of program completion MS May 2004 MS Oct 2008 MS Jun 2005 MS Jun 2005 MS Nov 2004 PhD Aug 2004	Адхізее	Weinhandl, Eric MS		Wold, Nicholas	Xie, Wanling		Yang, Lingfeng	Ye, Xin	Zhi, Xin

Mentoring of Training-Grant Funded Post-Doctoral Clinical Researchers

	10pic High-Field Magnetic Resonance Anatomical and Functional Imaging of	Deep Brain Structures	Allopregnanalone in smoking and cocaine cessation	Neural Correlates of Food Reward in American Indian Women	Magnetoencephalogaphy (MEG) in Multiple Sclerosis (MS)	Training effects on muscle lipid metabolism	Improved Breast MRI Utilizing SWIFT	Fronto-limbic connectivity in adolescents with major depression	Advanced Multi-Parametric MR Imaging for Renal Transplantation	Impact of Diabetes on Cerebral Structure and Function in Humans	Hippocampal metabolism and function in patients with type 1 diabetes	and hypoglycemia unawareness
f		Deel	Allo	Nen					Adv			and
Date of	program completion K12 Jul 2011				Jul 2011	Jul 2010	Feb 2015	Oct 2014		Feb 2015	Aug 2015	
Training	program K12		K12	K23	K12	K12	KL2	K23	KL2	KL2	KL2	
Home	Department Neurosurgery)	Family Medicine	Endocrinology		Endocrinology	Radiology	Psychiatry	Radiology	Radiology	Endocrinology	
() ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ;	Advisee Abosch, Aviva	`	Allen, Alicia	Beckman, Tiffany	Carpenter, Adam	Chow, Lisa	Corum, Curt	Cullen, Kathryn	Li, Xiufeng	Mangia, Silvia	Moheet, Amir	

Academic Non-Thesis Advising and Student Committees

Biostatistics Masters Students

	Degree		Date of	
Advisee	program	Degree	completion	Role
Ablorh, Akweley Dzomoh	Biostat	MS	Sep 2010	Advisor
Bolch, Charlotte	Biostat	MS		Advisor
Cai, Haowen	Biostat	MS	Aug 2008	Master's Final Member
Cao,Qing	Biostat	MS	Jul 2006	Master's Final Member/Adv
Clothier,Barbara Ann	Biostat	MS	Jul 2001	Master's Final Chair/Adv
Dai,Yu	Biostat	MS	Aug~2002	Master's Final Member
Fan, Haiyun	Biostat	MS	Sep 2005	Master's Final Member
Fan, Ying	Biostat	MS	Sep 2004	Master's Final Member
Guo,Xu	Biostat	MS	Oct 2001	Master's Final Member
Imm,So Jung	Biostat	MS	Dec 2003	Master's Final Member/Adv
Jerry,Heather	Biostat	MS		Advisor
Li,Lin	Biostat	MS	Aug 2003	Master's Final Chair/Adv
Li,Lingzhi	Biostat	MS	Sep 2011	Master's Final Chair/Adv
Li,Ruifeng	Biostat	MS	Nov 2001	Master's Final Member/Adv
Lin,E	Biostat	MS	Oct 2003	Master's Final Member
Liu,Chengcheng	Biostat	MS	Jul 2004	Master's Final Member
Liu,Xiao	Biostat	MS	Jul 2008	Master's Final Member
Lu,Haolan	Biostat	MS	Jul 2002	Master's Final Member
Luo,Liying	Biostat	MS	Nov 2011	Master's Final Member
Monteith, Melissa	Biostat	MS	inactive	Advisor
O'Keefe,Lauren	Biostat	MS		Advisor
Pruett,Khadeeja Mohamed	Biostat	MS	Mar 2003	Master's Final Member
Qi,Dongfeng	Biostat	MS	Jul 2003	Master's Final Chair/Adv
Schivitz, Elizabeth	Biostat	MS	Dec 2002	Master's Final Chair/Adv
Wang,Fan	Biostat	MS		Advisor
Xie,Benhuai	Biostat	MS	Nov 2007	Master's Final Chair/Adv
Xu,Lan	Biostat	MS	$\mathrm{Jun}\ 2000$	Master's Final Chair/Adv
Zabor, Emily Craig	Biostat	MS	Jul 2010	Master's Final Chair/Adv
Zhao,Luping	Biostat	MS	$\mathrm{Aug}\ 2005$	Master's Final Member
Zhu, Yanrong	Biostat	MS		Advisor

Continued on next page.

Academic Non-Thesis Advising and Student Committees

Biostatistics Doctoral Students

	Degree		Date of	
Advisee	program	Degree	completion	Role
Guo,Jia	Biostat	PhD	Oct 2006	PhD Prelim Member
				PhD Final Member
Hullsiek, Katherine Huppler	Biostat	PhD	Oct 1999	PhD Prelim Member
				PhD Final Member
Kim,Junghi	Biostat	PhD		PhD prelim Member
				PhD final Member
Modak,Sanjukta	Biostat	PhD	inactive	Advisor
Mugglin, Andrew S	Biostat	PhD	Feb 1999	PhD Final Member
Ren,Qian	Biostat	PhD	Aug~2012	PhD Prelim Member
				PhD Final Chair/Reader
Short, Margaret B	Biostat	PhD	Oct 2003	PhD Prelim Member
				PhD Final Reader
Zhu,Li	Biostat	PhD	$\mathrm{Aug}\ 2000$	PhD Prelim Member
				PhD Final Member

Continued on next page.

Academic Non-Thesis Advising and Student Committees

Masters and Doctoral Students in Other Fields

	Degree		Date of	
Advisee	program	Degree	completion	Role
Ariza-Nieto, Claudia Janeth	Ani Sci	PhD	Jan 2006	PhD Prelim Member
Ariza-Nieto, Claudia Janeth	Ani Sci	PhD	$\mathrm{Jan}\ 2006$	PhD Final Reader
Konishi, Meng	Appl Econ	MS	$\mathrm{Aug}\ 2006$	Master's Final Member
Chow,Lisa	Clin Rsrch	MS	Oct 2011	Master's Final Member
Smith, Daniel J	Compt Sci	MS	Jun 2006	Master's Final Member
Murray, Carson M	Ecol	PhD	Jul 2006	PhD Prelim Member
Murray, Carson M	Ecol	PhD	Jul 2006	PhD Final Reader
Bailey,Andrea	EEB	PhD		PhD Prelim Member
Lonsdorf, Elizabeth Vinson	EEB	PhD	$\mathrm{Jun}\ 2003$	PhD Final Reader
Macnulty, Daniel Robsert	Wild Cnsrv	MS	May 2002	MS Final Member
Macnulty, Daniel Robert	EEB	PhD	$\mathrm{Jun}\ 2007$	PhD Prelim Member
Macnulty, Daniel Robert	EEB	PhD	$\mathrm{Jun}\ 2007$	PhD Final Reader
Wroblewski, Emily E	EEB	PhD	Mar 2010	PhD Prelim Member
Wroblewski, Emily E	EEB	PhD	Mar 2010	PhD Final Reader
Forte,Kristin A	Env Hlth	MS	Jun 1999	Master's Final Member
Grice,Mira Michelle	Env Hlth	PhD	$\mathrm{Jul}\ 2007$	PhD Prelim Member
Grice,Mira Michelle	Env Hlth	PhD	Jul 2007	PhD Final Reader
Kukowski, Anne Elizabet	Env Hlth	MS	Jun 1998	Master's Final Member
Park,Ji Young	Env Hlth	PhD	$\mathrm{Aug}\ 2009$	PhD Prelim Member
Blair,Cynthia Kay	Epidemiol	PhD	May 2011	PhD Prelim Member
Blair,Cynthia Kay	Epidemiol	PhD	May 2011	PhD Final Reader
Chamberlain, Alanna	Epidemiol	PhD	Nov 2009	PhD Prelim Member
Chamberlain, Alanna	Epidemiol	PhD	Nov 2009	PhD Final Chair/Reader
Rapson,Ian	Epidemiol	MPH	$\mathrm{Apr}\ 2015$	Master's Final Member
Baines Simon, Alisha D	HlthSrvRPA	MS	May 2005	Master's Final Member
Butler, Mary E	HlthSrvRPA	PhD	$Mar\ 2007$	PhD Prelim Member
Butler, Mary E	HlthSrvRPA	PhD	$Mar\ 2007$	PhD Final Reader
Ghomrawi, Hassan	HlthSrvRPA	PhD	Dec 2007	PhD Prelim Member
Nelson, Winnie Wai-Han	HlthSrvRPA	MS	Aug 2003	Master's Final Member
Nitz, Nicole M	HlthSrvRPA	PhD	$\mathrm{Jun}\ 2005$	PhD Prelim Member
Nitz, Nicole M	HlthSrvRPA	PhD	$\mathrm{Jun}\ 2005$	PhD Final Reader
Wang, Jye	HlthSrvRPA	PhD	$\mathrm{Apr}\ 2007$	PhD Prelim Member
Wang, Jye	HlthSrvRPA	PhD	$\mathrm{Apr}\ 2007$	PhD Final Reader
Barin,Burc	Math	MS	Jul 2003	Master's Final Member
Lamba, Manisha	S,A,C Phar	PhD	Sep 2008	PhD Prelim Member
Lamba, Manisha	S,A,C Phar	PhD	Sep 2008	PhD Final Reader
Salem, Ahmed Hamed Ahmed	S,A,C Phar	PhD	$\mathrm{Jun}\ 2010$	PhD Prelim Member
Salem, Ahmed Hamed Ahmed	S,A,C Phar	PhD	$\mathrm{Jun}\ 2010$	PhD Final Chair/Reader
Aflleje,William D	Stat	MS	Jul 2006	Master's Final Member
Basak, Nandita	Stat	MS	Aug 2006	Master's Final Member

Continued from previous page.

	Degree		Date of	
Advisee	program	Degree	completion	Role
Borba de Andrade, Bernardo	Stat	MS	Sep 2004	Master's Final Member
Borba de Andrade,Bernardo	Stat	PhD	Jul 2007	PhD Prelim Member
Chiang, Chee-Wai	Stat	MS	Aug 2001	Master's Final Member
Dobbin,Kevin K	Stat	PhD	May 2001	PhD Prelim Member
Dobbin,Kevin K	Stat	PhD	May 2001	PhD Final Reader
Kivilaid,Kaisa	Stat	MS	Oct 2005	Master's Final Member
Neath,Ronald Charles	Stat	PhD	Aug~2006	PhD Prelim Member
Nienow, Aaron Kyle	Stat	MS	Jul 2006	Master's Final Member
Oehlert, Christine	Stat	MS	Sep 2011	Master's Final Member
Pham,Luu Duc	Stat	MS	Oct 2004	Master's Final Member
Pshon, Nicole Jean	Stat	MS	Aug~2005	Master's Final Member
Sartorius, Jennifer Alicia	Stat	MS	$\mathrm{Jun}\ 2004$	Master's Final Member
Gilby,Ian C	Zool	PhD	Nov 2004	PhD Final Reader

Professional Service

Refereeing of Publications

- * American Journal of Epidemiology
- * Archives of Gerontology and Geriatrics
 - American Statistician
- * Bayesian Analysis
 - Biometrical Journal
- * Biometrics
- * BMC Cancer
- * Circulation
- * Clinical Trials: Journal of the Society for Clinical Trials

 Controlled Clinical Trials
- * Critical Care Medicine

 Journal of Biopharmaceutical Statistics
- * Journal of Computational and Graphical Statistics
- * Journal of the American Statistical Association
- * Journal of the Royal Statistical Society Series C
 International Journal of Epidemiology
 Lifetime Data Analysis
- * Mathematical Biosciences
- * Psychometrika
 Statistical Science
- * Statistics in Medicine
- * John Wiley & Sons,
- * Prentice Hall
- * Springer-Verlag

Service to Professional Organizations: Meetings and Boards

Session Chair, "Growth Models and Curve Fitting," Joint Statistical Meetings, August 4-8 1996, Chicago, IL.

Session Chair, "Monte Carlo Markov: New Directions," Joint Statistical Meetings, August 10-14 1997, Anaheim, CA.

Session Chair, "Bayesian Non-parametrics," Joint Statistical Meetings, August 8-12 1999, Baltimore, MD.

Session Chair, "Bayesian Approaches to Repeated Measures," Joint Statistical Meetings, August 5-9 2001, Atlanta, GA.

Session Chair, "Survival Analysis and Clinical Trials," 2003 Eastern North American Region Spring Meetings of the International Biometric Society, March 30 - 2 April 2003, Tampa, FL.

Session Chair, "Bayesian Methods in Time Series," Joint Statistical Meetings, August 3-7 2003, San Francisco, CA.

- * Elected representative for the Council of Chapters for the Twin Cities Chapter of the American Statistical Association, January 2002–December 2004.
- * Session Chair, "Functional and Structural Neuro-Imaging Data: Modeling and Inference," Invited Session, 2007 Eastern North American Region Spring Meetings of the International Biometric Society, March 11-14, Atlanta, GA.
- * Invited Member, Advisory Board for the Medical Follow-up Agency (MFUA), Institute of Medicine, National Academy of Sciences, June 2003–December 2008.
- * Session Organizer, "Diffusion Tensor Imaging in the Brain," Topic Contributed Session, 2009 Joint Statistical Meetings, August 2-6, Washington, DC.
- * Session Chair, "Statistical Analysis of Brain Imaging Data," Invited Session, 2010 Eastern North American Region Spring Meetings of the International Biometric Society, March 21-24, New Orleans, LA.
- * Abstract Reviewer, Congress of Epidemiology 2011.
- * Session Chair, "Teaching Clinical Trials to Non-Statisticians," Topic Contributed Session, 2013 Joint Statistical Meetings, August 3-8, Montreal, Canada.
- * Invited Member, Regional Advisory Board (RAB) for the Eastern North American Region of the International Biometrics Society, Jan 2013 Dec 2015.
- * Inaugural Chair, Regional Advisory Board (RAB) Webinar Committee, Mar 2014 Dec 2015.

Service to Funding Organizations: Grant Review

Reviewer on the NIH (NINDS) Special Emphasis Panel "NeuroAIDS Studies," August 2002.

Reviewer on the NIH (NINDS) Special Emphasis Panel "NeuroAIDS Studies," April 2003.

- * Reviewer on the NIH (NIAID) Special Emphasis Panel "Immune System Development and the Genesis of Asthma," April 2004.
- * Reviewer for the Hong Kong Research Grants Council, May 2004.
- * Reviewer on the joint CDC and NIH (NIDDK) Special Emphasis Panel "Population-Based Diabetes in Youth Registry," April 2015.
- * Invited Member, Statistical Review Group for Medical Imaging Biomarker Studies, Cancer UK, May 2013 April 2016

Service to the University of Minnesota

School of Public Health Committees

Appointment, Promotion, and Tenure Ad Hoc committee, March 1998–June 1998.

* Biostatistics Division Head Search committees, September 1998–May 1998, August 2001–May 2002, September 2008–May 2009.

Environmental and Occupational Health Statistics Research Fellow Search committee, January 2000–March 2000.

Space Consolidation committee, June 2002–August 2002.

Recognition, Honors, and Awards committee, September 2002–August 2003.

- * Futures Committee, March 2005–May 2005.
- * Education Policy Committee, February 2005–July 2006, September 2007–December 2008.
- * Faculty Consultative Committee, September 2007–June 2009, **Chair** July 2009– June 2010.
- * Gender Equity Pay Adjustment Committee (GEPAC), August 2012 February 2013.

Division of Biostatistics Committees

Faculty and post-doc search committee, December 1997–April 1998.

CPCRA Research Associate search committee, December 1997–April 1998.

Computing Room committee (Mayo), August 1997–July 1998, **Chair** August 1999–August 2000.

Research Management committee, August 1998–August 1999.

Curriculum MS Core Courses (ex officio) Subcommittee, March 2000–June 2000.

Web Advisory committee, August 1999–August 2000.

- * Search committee for Bioinformatics faculty, March 2004–May 2004.
- * Search committee for Instructor, October 2004–April 2005.
- * Search committee for Director of BDAC and Research Associate, May 2006–June 2006.
- * Student Recruiting committee, August 1997–July 1998, Chair August 1998–July 2006.
- * Curriculum committee, August 1997–August 1999, Chair September 2000–July 2006, Chair September 2007–December 2008.

- * MPH Major Chair, February 2005–July 2006, September 2007–December 2008.
- * Services Courses Teaching Development Group, March 2012 present.
- * Faculty Search Committee, Chair, October 2013–April 2014.
- * Interim Director of Graduate Studies, and ex officio member of the Student Awards Committee, March–July 2015.
- * Graduate Admissions Committee, August 2011–July 2012, **Chair** August 2012–July 2015.

Professional Memberships

American Statistical Association

Association for Women in Mathematics

International Biometric Society, Eastern North American Region

University of Minnesota Cancer Center