

CURRICULUM VITAE
Susanne May, Ph.D.

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1. Biographical Information

Work address: Department of Biostatistics
Box 357232
University of Washington
Seattle, WA 98195-7232
Phone: (206) 616 – 6342
Fax: (206) 543 – 3286
E-mail: sjmay@uw.edu

2. Education

Technical University Karlsruhe, Germany, Diplom (equivalent to M.S.), Mathematics, 1994
University of Massachusetts, Amherst, MA, USA, Ph.D., Biostatistics, 2000

3. Licensure

Not applicable.

4. Professional Positions (e.g., Medical Residency, Fellowships, Faculty Appointments, etc)

Business and Computer Science Apprentice, Nixdorf Computer AG, Paderborn, Germany
8/1983 – 7/1986
Product Specialist, Nixdorf Computer AG, Paderborn, Germany, 8/1986 – 10/1988
Technical Marketing Specialist, Nova Data AG, Ittersbach, Germany, 2/1993 – 1/1995
Research Assistant, University of Massachusetts, Amherst, MA, USA, 1/1995 – 12/1998
Statistician, Applied Epidemiology Inc., Amherst, MA, USA, 5/1998 – 10/2000
Senior Statistician, Center for Community Health, University of California, Los Angeles, CA,
USA, 11/2000 – 10/2002
Lecturer, Department of Biostatistics, University of California, Los Angeles, CA, USA,
11/2000 – 6/2001
Adjunct Assistant Professor, Department of Biostatistics, University of California Los Angeles
USA, 7/2001 – 6/2002
Lecturer, Department of Biostatistics, University of California Los Angeles USA,
7/2002 – 10/2002
Associate Director of Methods Core, Center for Community Health, University of California,
Los Angeles, USA, 1/2002 – 10/2002
Assistant Professor, Division of Biostatistics, University of California San Diego, La Jolla, CA,
USA, 11/2002 – 6/2008
Associate Professor, Division of Biostatistics, University of California San Diego, La Jolla, CA,
USA, 7/2008 – 8/2008
Adjunct Associate Professor, Division of Biostatistics, University of California San Diego, La Jolla,
CA, USA, 9/2008 – 12/2011

Associate Professor, Department of Biostatistics, University of Washington, Seattle, WA, USA, 9/2008 – 6/2017

Associate Director, University of Washington Clinical Trials Center, Seattle WA, USA, 9/2009 – 1/2011

Director, University of Washington Clinical Trials Center, Seattle, WA, USA, 2/2011 – present

Professor, Department of Biostatistics, University of Washington, Seattle, WA, USA, 7/2017 – present

5. Honors, Awards, Scholarships

Elected Member of the Delta Omega Society (Public Health Honor Society), April 7, 2000

Graduate Student Travel Award, University of Massachusetts Amherst, 1998

6. Professional Activities (outside of UW)

Editorial Board

Biometrics, 2008 – 2016

Statistical Methods in Infectious Diseases, 2017 – present

Manuscript Reviewer for

Computational Statistics and Data Analysis

Human and Ecological Risk Assessment

Stata Journal

Health Psychology

Lifetime Data Analysis

Communications in Statistics

Nonparametric Statistics

Computational Methods and Programs in Biomedicine

Contemporary Clinical Trials

Biometrical Journal

Statistics in Medicine

Statistical Communications in Infectious Diseases

American Journal of Epidemiology

PLOS One

Welcome Open Research

Reviews

Grant reviews

National Research Foundation of Korea, August 2011

NINDS, ZNS1 SRB G (03), Special Emphasis Panel, ad hoc member, June 2015

NINDS, ZNS1 SRB G (03), Special Emphasis Panel, ad hoc member, March 2016

NINDS, ZNS1 SRB G (03), Special Emphasis Panel, ad hoc member, July 2016

NINDS, NSD-K, Initial Review Group, regular member, September 2016 - present Reports

Health Effects Institute, "Multicenter Ozone Study in Elderly Subjects", April 2016 – present

Membership in Professional Organizations

American Statistical Association, Member, 1993 – present

International Chinese Statistical Association, Member, 2004 – present

International Society for Clinical Biostatistics, Member, 2006 – 2010
Society for Clinical Trials, Member, 2009 – present
American Heart Association, Member 2010 – present
International Biometric Society, Member, 1997 – present
Western North American Region (WNAR), Representative At-Large, 2011 – 2013
WNAR, President-elect 2015,
WNAR, President 2016,
WNAR, Past-president 2017
COPSS: Elizabeth L. Scott Award Committee, WNAR representative 2017-2021

Other professional activities

Represented UCSD Biostatistics and Bioinformatics at SDASA Careers Day, April 30, 2005
SDSU, San Diego
Represented UCSD Biostatistics and Bioinformatics at SDASA Careers Day, May 20, 2006
UCSD, San Diego
Member, Data Safety Monitoring Board, Open Label Clinical Trial for the Wearable Artificial
Kidney, University of Washington Kidney Research Institute, 2014 – 2016
Chair, Data Safety Monitoring Board, HIPPO Trial, Kaiser Permanente Washington Health
Research Institute, 2017 – present

Consultancies

Environ, May 2010 – April 2011. Provided statistical input for a protocol development for a study
of health effects in a mixed population of tobacco users and non-users funded by RJ
Reynolds.
National Academy of Sciences – Institute of Medicine, October 2014 – March 2015, Consultant to
the Committee Treatment of Cardiac Arrest: Current Status and Future Directions.
Member, Data Safety Monitoring Board, Novo Nordisk, 2015 – present
FDA, Special Government Employee, Pulmonary-Allergy Drugs Advisory Committee, 2017 –
present

7. Bibliography

a) Refereed Research Articles

1. **S. May** and D.W. Hosmer (1998). A Simplified Method of Calculating an Overall Goodness-of-Fit Test for the Cox Proportional Hazards Model. *Lifetime Data Analysis*, 4, 109-120. PMID: 9658770
2. J.E. Flack, J.R. Cook, **S. May**, S. Lemeshow, R.M. Engelman, J.A. Rousou and D.W. Deaton (2000). Does Cardioplegia Type Affect Outcome and Survival in Patients with Advanced Left Ventricular Dysfunction? Results from the CABG Patch Trial. *Circulation*, 102, 84-89. PMID: 11082368.
3. S.H. Gehlbach, C. Bigelow, M. Heimisdottir, **S. May**, M. Walker and J.R. Kirkwood (2000). Recognition of Vertebral Fracture in a Clinical Setting. *Osteoporosis International*, 11, 577-582. PMID: 11069191.
4. K.A. Mundt and **S. May** (2001). Epidemiological Assessment of Hormesis in Studies with LowLevel Exposure. *Human and Ecological Risk Assessment*, 7, 795-809.

5. **S. May** and D.W. Hosmer (2004). A Cautionary Note on the Use of the Grønnesby and Borgan Goodness-of-Fit Test for the Cox Proportional Hazards Model. *Lifetime Data Analysis*, 10, 283-291. PMID: 15456108
6. **S. May** and D.W. Hosmer (2004). An Added Variable Goodness-of-Fit Test for the Cox Proportional Hazards Model. *Biometrical Journal*, 46, 343-350.
7. M. Lightfoot, T. Rogers, R. Goldstein, M.J. Rotheram-Borus, **S. May**, S. Kirshenbaum, L. Weinhardt, C. Zadoretzky, L. Kittel, M. Johnson, C. Gore-Felton and S.F. Morin (2005). Predictors of Substance Use Frequency and Reductions in Seriousness of Use among Persons Living with HIV. *Drug Alcohol Depend*, 77, 129-138. PMID: 15664714.
8. J. Fan, **S. May**, Y. Zhou and E. Barrett-Connor (2005). Bimodality of 2-H Plasma Glucose Distributions in Whites: The Rancho Bernardo Study. *Diabetes Care*, 28, 1451-1456. PMID: 15920067.
9. **S. May** and C. Bigelow (2005). Modeling Nonlinear Dose-Response Relationships in Epidemiologic Studies: Statistical Approaches and Practical Challenges. *Dose-Response*, 3, 474-490. PMID: 18648629 PMCID: PMC2477199
10. S. Bava, A.O. Ballantyne, **S. May** and D. Trauner (2005). Perceptual Asymmetry for Chimeric Stimuli in Children with Early Unilateral Brain Damage. *Brain and Cognition*, 59(1), 1-10. PMID: 16198818.
11. **S. May**, P. Lester, M.B. Ilardi and M.J. Rotheram-Borus (2006). Childbearing among Adolescents of Parents with HIV: Base Rates, Predictors, and Intervention Effects. *American Journal of Health Behavior*, 30(1), 72-84. PMID 16430322
12. A. Witkin, N. Milburn, M.J. Rotheram-Borus, P. Batterham, **S. May** and R. Brooks (2005), "Finding Homeless Youth: Patterns Based on Geographic Area and Number of Homeless Episodes." *Youth and Society*, 37, 62-84.
13. C. Mathews, J. Caperna, E. Barber, F. Torriani, L. Miller, **S. May**, and J.A. McCutchan (2005), "Incidence of and Risk Factors for Clinically Significant MRSA Infection in a Cohort of HIV infected adults", *Journal of Acquired Immune Deficiency Syndromes*, 40(2), 155-60. PMID: 16186732.
14. S. Gilman, **S. May**, C.W. Shults, C.M. Tanner, W. Kukull, V.M.-Y. Lee, E. Masliah, P. Low, P. Sandroni, J.Q. Trojanowski, L. Ozelius, T. Foroud, and the North American Multiple System Atrophy Study Group (2005), "The North American Multiple System Atrophy Study Group", *Journal of Neural Transmission*, 112(12), 1687-1694. PMID: 16284910.
15. M. Goicoechea, D. Smith, L. Liu, **S. May**, A. Tenorio, A. Landay, and R. Haubrich. (2006), "Determinants of Immunologic Discordance During Optimal Viral Suppression with Potent Antiretroviral Therapy", *Journal of Infectious Diseases*, 194(1), 29-37. PMID: 16741879.
16. G.A. Laughlin, E. Barrett-Connor, and **S. May** (2006), "Sex-specific Association of the Androgen to Estrogen Ratio with Adipocytokine Levels in Older Adults: The Rancho Bernardo Study", *Clinical Endocrinology*, 65, 506-513. PMID: 16984244.

17. G.A. Laughlin, E. Barrett-Connor, and **S. May** (2006), "Sex-Specific Determinants of Serum Adiponectin in Older Adults: The Role of Endogenous Sex Hormones", *International Journal of Obesity*, 31(3), 457-465. PMID: 16819528.
18. G.A. Laughlin, E. Barrett-Connor, **S. May**, and C. Langenberg (2007), "Association of Adiponectin with Coronary Heart Disease and Mortality: The Rancho Bernardo Study", *American Journal of Epidemiology*, 165(2), 164-174. PMID: 17101706.
19. **S. May** and V. DeGruttola (2007), "Nonparametric Tests for Two Group Comparisons of Dependent Observations Obtained at Varying Time Points", *Biometrics*, 63, 194-200. PMID: 17447945
20. L.J. Ozelius, T. Foroud, **S. May**, G. Senthil, P. Sandroni, P.A. Low, S. Reich, A. Colcher, M.B. Stern, W.G. Ondo, J. Jankovic, N. Huang, C.M. Tanner, P. Novak, S. Gilman, J.F. Marshall, G.F. Wooten, T.C. Chelimsky, C.W. Shults and the North American Multiple System Atrophy Study Group (2007), "The G2019S mutation in LRRK2 is not associated with multiple system atrophy", *Movement Disorders*, 22(4), 546-549. PMID: 17230458.
21. **S. May**, S. Letendre, R. Haubrich, J.A. McCutchan, R. Heaton, E. Capparelli, R. Ellis (2007), "Meeting practical challenges of a trial involving a multitude of treatment regimens: an example of a multi-center randomized controlled clinical trial in NeuroAIDS", *Journal of Neuroimmune Pharmacology*, DOI 10.1007/s11481-006-9057-8. PMID: 18040832
22. C. Mathews and **S. May** (2007), "EuroQol (EQ-5D) Measure of Quality of Life Predicts Mortality, Emergency Department Utilization, and Hospital Discharge Rates of HIV-infected Adults in Care", *Health and Quality of Life Outcomes*, DOI 10.1186/l 477-7525-5-5. PMID: 17254361.
23. **S. May**, S. Gilman, B.B. Sowell, R.G. Thomas, M.B. Stern, A. Colcher, C.M. Tanner, N. Huang, P. Novak, S. Reich, J. Jankovic, W.G. Ondo, P.A. Low, P. Sandroni, A. Lipp, F. J. Marshall, F. Wooten, C.W. Shults, and the North American Multiple System Atrophy Study Group (2007) "Potential Outcome Measures and Trial Design Issues for Multiple System Atrophy", *Movement Disorders*, 22(16), 2371-2377. PMID: 17914727
24. D. Galasko, N. Graff-Radford, **S. May**, S. Hendrix, B.A. Cottrell, S.A. Saqi, G. Mather, M. Laughlin, K. Zavitz, E. Swabb, T. E. Golde, M.P. Murphy, E.H. Koo (2007), "Safety, Tolerability, Pharmacokinetics and A β Levels after Short-term Administration of R-flurbiprofen in Healthy Elderly Individuals" *Alzheimer Disease and Associated Disorders*, 21(4), 292-299. PMID: 18090435.
25. K.K. Koelsch, L. Liu, R. Haubrich, **S. May**, D. Havlir, H. Guenthard, C.C. Ignacio, P. CamposSoto, S.J. Little, R. Shafer, G. Robbins, R.T. D`Aquila, Y. Kawano, K. Young, P. Dao, C.A. Spina, D.D. Richman and J.K. Wong (2008), "Dynamics of total, linear non-integrated and integrated HIV-1 DNA in vitro and in vivo," *Journal of Infectious Diseases*, 197(3), 411-419. PMID: 18248304
26. L. Liu, **S. May**, D.D. Richman, F.M. Hecht, M. Markowitz, E.S. Daar, J.P. Routy, J.B. Margolick, A.C. Collier, C.H. Woelk, S.J. Little and D.M. Smith, (2008) "Comparison of Algorithms that Interpret Genotypic HIV-1 Drug Resistance to Determine the Prevalence of Transmitted Drug Resistance," *AIDS*, 22(7), 835-839. PMID: 18427201 PMCID: PMC2716722

27. J. Greenberg, **S. May**, A. Suliman and N. Angle, (2008) "The Brachial Artery-Brachial Vein Fistula: Expanding the Possibilities for Autogenous Fistulae," *Journal of Vascular Surgery*, 48(5), 1245-1250. PMID: 18971036.
28. W.C. Mathews, E. Barker, E. Winter, C. Ballard, B. Colwell, and **S. May** (2008), "Predictive Validity of a Brief Antiretroviral Adherence Index: Retrospective Cohort Analysis under Conditions of Repetitive Administration," *AIDS research and Therapy*, 5:20, doi:10.1186/17426405-20. PMID: 18759989.
29. D.M. Smith, **S. May**, S. Tweeten, L. Drumright, M. Pacold, S.L. Kosakovsky Pond, Pesano, Y. Lie, D.D. Richman, S.D.W. Frost, C. Woelk, R. and S.J. Little, (2009) "A Public Health Model for the Molecular Surveillance of HIV Transmission in San Diego, California," *AIDS*,23(2) 225232. PMID: 19098493 PMCID: PMC2644048
30. S. Bava, R.J. Theilmann, M. Sach, **S.J. May**, L.R. Frank, J.R. Hesselink, D. Vu and D.A. Trauner, (2009) "Developmental Changes in Cerebral White Matter Microstructure in a Disorder of Lysosomal Storage," *Cortex*, doi:10.1016/j.cortex.2009.03.008. PMID: 19427638.
31. D.M. Smith, **S. May**, J. Pérez-Santiago, M.C. Strain, C.C. Ignacio, R.H. Haubrich, D.D. Richman, C.A. Benson, S.J. Little (2009), "The Use of Pooled Viral Load Testing to Identify Antiretroviral Treatment Failure", *AIDS*, 23(16), 2151-2158. PMID: 19730348 PMCID: PMC2915784.
32. N.G. Milburn, E. Rice, M.J. Rotherarm-Borus, S. Mallett, D. Rosenthal, P. Batterham, S.J. May, A. Witkin and N. Duan, (2009) "Adolescents Exiting Homelessness Over Two Years: The Risk Amplification and Abatement Model," *Journal of Research on Adolescence*, 19(4), 762785. PMID: 25067896.
33. Y. Yang, J. Fan, and **S. May** (2010), "Bimodality of plasma glucose distributions in whites: a bootstrap approach to testing mixture models," *Journal of Data Science*, 8, 483-493.
34. **S. May**, A. Gamst, R. Haubrich, C. Benson, and D.M. Smith, (2010) "Pooled Nucleic Acid Testing to Identify Antiretroviral Treatment Failure during HIV Infection," *JAIDS*, 53, 194-201. PMID: 19770802.
35. E.M. Bulger, **S. May**, K.J. Brasel, M.A. Schreiber, J.D. Kerby, S.A. Tisherman, C. Newgard, A. Slutsky, R. Coimbra, S. Emerson, J.P. Minei, B. Bardarson, P. Kudenchuk, A. Baker, J. Christenson, A. Idris, D. Davis, T.C. Fabian, T.P. Aufderheide, C. Callaway, C. Williams, J. Banek, C. Vaillancourt, R. van Heest, G. Sopko, J.S. Hata, D.B. Hoyt, (2010) "Prehospital Hypertonic Resuscitation following Traumatic Brain Injury: A Randomized, Placebo Controlled Trial," *JAMA*,304(13), 1455-1464. PMID: 20924011
36. E.M. Bulger, **S. May**, J. Kerby, S. Emerson, I.G. Stiell, M.A. Schreiber, K.J. Brasel, S.A. Tisherman, R. Coimbra, S. Rizoli, J.P. Minei, J.S. Hata, G. Sopko, D. Evans, D.B. Hoyt, (2011) "Out-of-hospital Hypertonic Resuscitation After Traumatic Hypovolemic Shock: A Randomized, Placebo Controlled Trial," *Annals of Surgery*. 253(3):431-441 doi: 10.1097/SLA.0b013e3181fcd22. PMID: 21178763
37. M.W. Tilghman, D.D. Guereña, A. Licea, J.P. Santiago, D.D. Richman, **S. May**, and Davey M. Smith, (2011) "Pooled Nucleic Acid Testing to Detect Antiretroviral Treatment Failure in Mexico," *JAIDS*, 56, e70-e74. PMID: 21124228.

38. S. Cheskes, R.H. Schmicker, J. Christenson, D.D. Salcido, T. Rea, J. Powell, D.P. Edelson, R. Sell, **S. May**, J.J. Menegazzi, L. van Ottingham, M. Olsufka, S. Pennington, J. Simonini, R.A. Berg, I. Stiell, A. Idris, B. Bigham, L. Morrison and the Resuscitation Outcomes Consortium (ROC) investigators, (2011) Peri-shock pause: an independent predictor of survival from out-of-hospital shockable cardiac arrest, *Circulation*, doi: 10.1161/CIRCULATIONAHA.110.010736. PMID: 21690495 PMID: 21690495
39. M.W. Tilghman, **S. May**, J. Pérez-Santiago, C.C. Ignacio, S.J. Little, D.D. Richman, D.M. Smith, (2012) "A Combined Screening Platform for HIV Treatment Failure and Resistance", *PLoS ONE*, 7(4): e35401, doi:10.1371/journal.pone.0035401. PMID: 22563383
40. J. Harbertson, M. Grillo, E. Zimulinda, C. Murego, S. Brodine, **S. May**, M. Sebagabo, M.R.G. Araneta, T. Cronan, and R. Shaffer, (2013) "HIV Seroprevalence, Associated Risk Behavior and Alcohol Use Among Male Rwanda Defense Forces Military Personnel", *AIDS and Behavior*, 17(5), p1734-1745. PMID: 23692352.
41. * S. Grant, Y.Q. Chen, **S. May**, (2013) "Performance of Goodness-of-Fit Tests for the Cox Proportional Hazards Model with Time-Varying Covariates", *Lifetime Data Analysis*, DOI: 10.1007/s10985-013-9277-1. [* S. Grant is Biostatistics MS graduate], PMID: 23925703.
42. G.K. Hightower, **S. May**, J. P Pérez-Santiago, M.E. Pacold, G.A. Wagner, S.J. Little, D.D. Richman, S.R. Mehta, D.M. Smith, S.L. Kosakovsky Pond (2013) "HIV-1 clade B *pol* Evolution Following Primary Infection", *PLoS ONE*, 8(6), doi:10.1371/journal.pone.0068188, PMID: 23840830.
43. J. Harbertson, M. Grillo, E. Zimulinda, C. Murego, T. Cronan, **S. May**, S. Brodine, M. Sebagabo, M.R.G. Araneta, and R. Shaffer, (2013) "Prevalence of PTSD and Depression, and Associated Sexual Risk Factors, Among Male Rwanda Defense Forces Military Personnel", *Tropical Medicine and International Health*, v18 n8, 925-933. PMID: 23692352.
44. R.J. Ellis, S. Letendre, F. Vaida, R. Haubrich, R.K. Heaton, N. Sacktor, D.B. Clifford, B. Best, **S. May**, A. Umlauf, M. Cherner, C. Sanders, C. Ballard, D.M. Simpson, C. Jay, J.A. McCutchan, "A Randomized Trial of a CNS-Targeted Antiretroviral Treatment Strategy versus non-CNS-Targeted Regimens for HIV-Associated Neurocognitive Disorders, (2014) *Clinical Infectious Diseases*, 58(7), 1015-1022. PMID: 24352352.
45. S. Cheskes, R.H. Schmicker, P.R. Verbeek, D.D. Salcido, S.P. Brown, S. Brooks, J.J. Menegazzi, C. Vaillancourt, J. Powell, **S. May**, R.A. Berg, R. Sell, A. Idris, M. Kampp, T. Schmidt, J. Christenson and the Resuscitation Outcomes Consortium (ROC) investigators (2014) "The Impact of Peri-Shock Pause on Survival from Out-of-Hospital Shockable Cardiac Arrest During the Resuscitation Outcomes Consortium PRIMED Trial", *Resuscitation*, 85(3) 336-342. PMID: 24513129. 46. S.J. Little, S.L.K. Pond, C.M. Anderson, J.A. Young, J.O. Wertheim, S.R. Mehta, **S. May**, D.M. Smith, (2014) "Using HIV Networks to Inform Real Time Prevention Interventions", *PLoS ONE*, 9(6): e98443, doi:10.1371/journal.pone.0098443. PMID: 24901437.
47. C. Nishiyama, S.P. Brown, **S. May**, T. Iwami, R.W. Koster, S.G. Beesems, I. Jacobs, J. Finn, K. Smith, F. Sterz, A. Nürnberger, T.M. Olasveengen, S.D. Shin, M.H.M. Ma, J.T. Gräsner, S. Masterson, M. Kuisma, A. Salo, J. Herlitz, A. Strömsöe, T.P. Aufderheide, C.W. Callaway, J. Christenson, D. Davis, M. Daya, L. Morrison, I. Stiell, H. Wang, E. Huszti, G. Nichol, (2014)

- “Apples to Apples or Apples to Oranges? International Variation in Reporting of Process and Outcome of Care for Out-of-Hospital Cardiac Arrest”, *Resuscitation*, 85(11), 1599-1609. PMID: 25010784.
48. G. van Belle, S.D. Mentzelopoulos, T. Aufderheide, **S. May**, and G. Nichol, (2015) “International Variation in Policies and Practices Related to Informed Consent in Acute Cardiovascular Research: Results from a 44 Country Survey”, *Resuscitation*, 91, 76-83. PMID: 25524361.
 49. M. Daya, R.H. Schmicker, D. Zive, T. Rea, G. Nichol, J.E. Buick, S Brooks, J. Christenson, R. MacPhee, A. Craig, J.C. Rittenberger, D. Davis, **S. May**, J. Wigginton, H. Wang, (2015) “Secular Trends in Community Cardiac Arrest Survival: Results from the Resuscitation Outcomes Consortium (ROC)”, *Resuscitation*, 91, 108-115. PMID: 25676321.
 50. M.A. Schreiber, E.N. Meier, S.A. Tisherman, J.D. Kerby, C.D. Newgard, K. Brasel, D. Egan, W. Witham, C. Williams, M. Daya, J. Beeson, B.H. McCully, S. Wheeler, D. Kannas, **S. May**, B. McKnight, D.B. Hoyt; for the ROC Investigators, (2015) “A Controlled Resuscitation Strategy is Feasible and Safe in Hypotensive Trauma Patients: Results of a Prospective Randomized Pilot Trial”, *Journal of Trauma*, 74(4), 687-697. PMID: 25807399.
 51. D.L. Andrusiek, D. Szydlo, **S. May**, K. Brasel, J. Minei, R. van Heest, R. MacDonald, M. Schreiber, (2015) “A Comparison of Invasive Airway Management and Rates of Pneumonia in Prehospital and Hospital Settings”, *Prehospital Emergency Care*, doi:10.3109/10903127.2015.1005263, <<http://informahealthcare.com/doi/abs/10.3109/10903127.2015.1005263>>., PMID: 25909984.
 52. E.M. Mosites, P.M. Rabinowitz, S.M. Thumbi, J.M. Montgomery, G.H. Palmer, **S. May**, A. Rowhani-Rahbar, M.L. Neuhouser, J.L. Walson, (2015) “The Relationship between Livestock Ownership and Child Stunting in Three Countries in Eastern Africa Using National Survey Data”, *PLoS ONE*, Sept 11, DOI: 10.1371/journal.pone.0136686. PMID: 26361393. 53. L. Crouch, **S. May**, and Y.Q. Chen, (2015) “On Estimation of Covariate-Specific Residual Time Quantiles under the Proportional Hazards Model”, *Lifetime Data Analysis*, DOI: 10.1007/s10985-015-9332-1. PMID: 26058825.
 54. G. Nichol, B. Leroux, H. Wang, C. Callaway, G. Sopko, M. Weisfeldt, I. Stiell, L. Morrison, T. Aufderheide, S. Cheskes, J. Christenson, P. Kudenchuk, C. Vaillancourt, T. Rea, A. Idris, R. Colella, M. Isaacs, R. Straight, S. Stephens, J. Richardson, J. Condle, R. Schmicker, D. Egan, **S. May**, J. Ornato and the Resuscitation Outcomes Consortium (ROC) Investigators (2015) “Resuscitation Outcomes Consortium Trial of Continuous or Interrupted Chest Compressions”, *NEJM*, DOI: 10.1056/NEJMoa1509139. PMID: 26550795.
 55. M. Tilghman, D. Tsai, T.P. Buene, M. Tomas, S. Amade, D. Gehlbach, S. Chang, C. Ignacio, G. B=Caballero, S. Espitia, **S. May**, E.V. Noormahomed, and D.M. Smith, (2015), “Pooled Nucleic Acid Testing to Detect Antiretroviral Treatment Failure in HIV-Infected Patients in Mozambique”, *J Acquir. Immune Defic. Syndr.* 70(3), 256-261, doi: 10.1097/QAI.0000000000000724. PMID: 26135327.
 56. E. M. Mosites, S.M. Thumbi, E.Otiang, T McElwain, M.K. Njenga, P.M. Rabinowitz, A. Rowhani-Rahbar, M.L. Neuhouser, **S. May**, G.H. Palmer, J.L. Walson, (2016) “The

association between poor household livestock health and lower childhood growth can be dependent on season and child age”, *The Journal of Nutrition*, *accepted*.

57. H.E. Wang, D. Prince, S.W. Stephens, H. Herren, M. Daya, N. Richmond, J. Carlson, C. Warden, M. R. Colella, A. Brienza, T.P. Aufderheide, A. Idris, R. Schmicker, **S. May**, and G. Nichol, (2016) “Design and Implementation of the Resuscitation Outcomes Consortium Pragmatic Airway Resuscitation Trial (PART)”, *Resuscitation*, 101, 57-64.
58. **S. May** and B. McKnight, (2017) “Graphics and Statistics for Cardiology: Survival Analysis”, *Heart*, 0: 1-6, doi:10.1136/heartjnl-2015-308229.
59. M.A. Starks, R. Schmicker, E.D. Peterson, **S. May**, J.E. Buick, P.J. Kudenchuk, I.R. Drennan, H. Herren, J. Jasti, M. Sayre, D. Stub, G.M. Vilke, S.W. Stephens, A.M. Chang, J. Nuttall, G. Nichol, (2017) “Where You Live May Matter: Impact of Neighborhood Racial Demographics on Out-of-Hospital Cardiac Arrest Treatment and Outcomes”, *JAMA Cardiology*, doi:10.1001/jamacario.2017.2671.
60. H.E. Wang, D.K. Prince, I.R. Drennan, B. Grunau, D. Carlboom, N. Johnson, M. Hansen, J. Elmer, J. Christenson, P. Kudenchuk, T. Aufderheide, M. Weisfeldt, A. Idris, S. Trzeciak, M. Kurz, J.C. Rittenberger, D. Griffiths, J. Jasti, **S. May** (2017) “Post-resuscitation arterial oxygen and carbon dioxide and outcomes after out-of-hospital cardiac arrest”, *Resuscitation*, 120, 113-118. doi: 10.1016/j.resuscitation.2017.08.244.
61. R.A. Pollack, S.P. Brown, T. Rea, T. Aufderheide, D. Barbic, J.E. Buick, J. Christenson, A. Idris, J. Jasti, M. Kampp, P. Kudenchuk, **S. May**, M. Muhr, G. Nichol, J.P. Ornato, G. Sopko, C. Vaillancourt, L. Morrison, M. Weisfeldt, and the ROC Investigators, “Impact of bystander automated external defibrillator use on survival and functional outcomes in shockable observed public cardiac arrests”, *Circulation*, *accepted*.
62. F. Kim, C. Dezfulian, P.E. Empey, M. Morrell, M. Olsufka, S. Scruggs, P. Kudenchuk, **S. May**, C. Maynard, M. Sayre, G. Nichol, (2018) “Phase I clinical study of intravenous sodium nitrite for the treatment of out-of-hospital cardiac arrest”, *American Journal of Cardiology*, 122, 554559.
63. D.M. Zive, R. Schmicker, M. Daya, P. Kudenchuk, G. Nichol, J.C. Rittenberger, T. Aufderheide, G.M. Vilke, J. Christenson, J.E. Buick, K. Kaila, S. May, T. Rea, L.J. Morrison for the ROC Investigators, (2018) “Survival and variability over time from out of hospital cardiac across large geographically diverse communities participating in the Resuscitation Outcomes Consortium”, *Resuscitation*, 131, 74-82.
64. A.S. Ginsburg, T. Mvalo, E. Nkwopara, E. McCollum, C.B. Ndamala, R. Schmicker, A. Phiri, N. Lufesi, R. Izadnegahdar, **S. May** (2018) “Placebo versus amoxicillin for non-severe fast breathing pneumonia in Malawian children aged two to 59 month: a double-blind, randomized controlled non-inferiority trial”, *JAMA Pediatrics*, doi:10.1001/jamapediatrics.2018.3407.
65. H.E. Wang, R.H. Schmicker, M.R. Daya, S.W. Stephens, A.H. Idris, J.N. Carlson, M.R. Colella, H. Herren, M. Hansen, N.J. Richmond, J.C.J. Puyana, T.P. Aufderheide, R.E. Gray, P.C. Gray, M. Verkest, P.C. Owens, A.M. Brienza, K.J. Sternig, **S. May**, G.R. Sopko, M.L. Weisfeldt, G. Nichol for the Resuscitation Outcomes Consortium Investigators, (2018) “Effect of a Strategy of Initial Laryngeal Tube INsertion vs. Endotracheal Intubation on 72-Hour

Survival in Adults with Out-of-Hospital Cardiac Arrest: A Randomized Clinical Trial, *JAMA* 320(8):769-778. doi:10.1001/jama.2018.7044

66. R.A. Pollack, S.P. Brown, **S. May**, T. Rea, P.J. Kudenchuk and M.L. Weisfeldt (2019) "Bystander Automated External Defibrillator Application in Non-Shockable Out-Of-Hospital Cardiac Arrest", *Resuscitation*, *accepted*.
67. K. Dyson, S.P. Brown, **S. May**, Karen Smith, R. Koster, SG. Beesems, M Kuisma, A. Salo, J. Finn, F. Sterz, A. Nürnberger, L. Morrison, T.M. Olasveengen, C. Callaway, S.D. Shin, J.T. Gräsner, M. Daya, M. Huei-Ming Ma, J. Herlitz, A. Strömsöe, T. Aufderheide, S. Masterson, H. Wang, J. Christenson, I. Stiell, G. Vilke, A. Idris, C. Nishiyama, T. Iwami, G. Nichol, (2018) "International variation in survival after out-of-hospital cardiac arrest: a validation study of the Utstein template", *Resuscitation*, *accepted*.
68. E. Nkwopara, R. Schmicker, T. Mvalo, **S. May**, A.S. Ginsburg (2019) "Geographically linked risk factors for enrollment into a fast breathing child pneumonia trial in Lilongwe, Malawi: an Innovative Treatments in Pneumonia (ITIP) secondary analysis", *BMJ Open Respiratory Research*, 6(1):e000414. Doi: 10.1136/bmjresp-2019-000414. PMID:31179007.
69. E.D. McCollum, S.P. Brown, E. Nkwopara, T. Mvalo, S. May, and A. Ginsburg (2019) "Development of a prognostic risk score to aid antibiotic decision-making for children aged 259 months with World Health Organization fast breathing pneumonia in Malawi: an Innovative Treatments in Pneumonia (ITIP) secondary analysis", *PLOS One*, *accepted*.
70. A.S. Ginsburg, **S. May**, E. Nkwopara, G. Ambler, E.D. McCollum, T. Mvalo, A. Phiri, N. Lufesi, S. Sadruddin, "Methods for conducting a double-blind randomized controlled clinical trial of three days versus five days amoxicillin dispersible tablets for chest indrawing childhood pneumonia among children two to 59 months of age in Lilongwe, Malawi", *submitted*.
71. **S. May**, S.P. Brown, R.H. Schmicker, S. Emerson, E. Nkwopara and A.S. Ginsburg, "Noninferiority designs comparing placebo to a proven therapy for childhood pneumonia in low resource settings", *submitted*.

* Manuscripts where the first author performed the work for a MS or PhD thesis in Biostatistics or Statistics and S. May was either chair or co-chair of the MS or PhD committee.

b) Other Refereed Scholarly Publications

72. **May, S.** and Hosmer, D.W. (2004). Hosmer and Lemeshow Type Goodness-of-Fit Statistics for the Cox Proportional Hazards Model: *Handbook of Statistics: Survival Analysis, Chapter 21*, Elsevier, North-Holland. (book chapter, peer reviewed)
73. M. Goicoechea, D. Smith, **S. May**, C. Mathews and C. Spina (2009), "Prevalence and T-cell phenotype of slow HIV disease progressors with robust HIV replication." *J Acquir Immune Defic Syndr*. Letter to the Editor, 52(2), 299-301, PMID: 20118679.

c) Books and Book Chapters

74. A.A. Afifi, V. Clark and **S. May** (2004). *Computer-Aided Multivariate Analysis*. 4th ed., Chapman & Hall/CRC. Boca Raton, Fla.

75. D.W. Hosmer, S. Lemeshow and **S. May**, (2008). *Applied Survival Analysis: Regression Modeling of Time to Event Data*, 2nd edition, Wiley, New York. [3rd edition in progress]
76. A.A. Afifi, **S. May** and V. Clark (2011). *Practical Multivariate Analysis*. (formerly *ComputerAided Multivariate Analysis*) 5th ed., Chapman & Hall/CRC. Boca Raton, Fla. [6th edition to be completed by 2019]

d) Other Non-Refereed Published Scholarly Publications (proceedings, policy reports, technical reports, book reviews, editorials, letters to the editor)

77. **S. May**, (2006). Book review: Advanced Excel for Scientific Data Analysis, *Biometrics*, 62, 303-304.
78. **S. May** and D.W. Hosmer (2007). Survival Analysis Regression, in the International Encyclopedia of the Sciences, 2nd edition.
79. B. Hanscom, **S. May** and J.P. Hughes (2014). "Efficiently Identifying Failures using Quantitative Tests, Matrix-Pooling and the EM-Algorithm. *UW Biostatistics Working Paper Series*. Working Paper 402, <http://biostats.bepress.com/uwbiostat/paper402>.

8. Patents and Other Intellectual Property

Not applicable.

9. Funding History

9a. Funded Projects

R01AI029168, NIAID, Hughes (PI) 09/30/1989 – 04/30/2024
NIAID

Statistical Issues in AIDS Research

The general goals in this submission include work on methods enabling more effective design and analysis of AIDS clinical trials, work on approaches relating to prevalence estimation and prediction, work on improving the availability of computer software to analyze clinical data arising in registries, and work on approaches to providing confidentiality of AIDS research data. Role: Co-investigator (since 3/2010)

R01 GM127790, NIGMS, G O'Keefe (PI) 09/18/2018 – 06/30/2022

"Protein-enhanced enteral nutrition and metabolomics in critically ill trauma and surgical patients" (*A132484 Enteral protein*)

This application aims to understand whether high dose early enteral protein supplementation can improve biochemical markers of nutrition and metabolism and whether we can use clinical and metabolomic data to estimate urinary nitrogen excretion and predict protein needs in critically ill surgical and trauma patients. Taken together, this study will move us closer to applying precision nutritional support and improve the outcomes and reduce the costs of caring for critically ill patients.

Role: Statistician

R01 HL146226, NHLBI, Key/sub-Gernsheimer 01/01/2019 – 12/31/2021
Fibrinolysis Evaluation in A-TREAT ('FEAT' Study)

The Fibrinolysis Evaluation in A-TREAT ('FEAT') study is an ancillary study to the ongoing ATREAT study. The study investigates whether global plasma assays of fibrinolysis may be used to predict bleeding in patients with severe hypoproliferative thrombocytopenia.

R01HL129722, NHLBI, PI: Kim 07/01/2016 – 04/30/2021
Randomized Clinical Trial of Sodium Nitrite for out of Hospital Cardiac Arrest

Description: The overall goal of this study is to determine whether the administration of sodium nitrite is safe and efficacious during on-going resuscitation for out-of-hospital cardiac arrest. Role: Statistician

R01 AI118422, NIAID, PI: Smith 02/01/2016 – 01/31/2021
Perturbing the HIV Reservoir with Immune Stimulation

This study will test standard vaccines in chronically treated participants to identify those vaccines that are able to induce the largest amount of cell-associated HIV RNA from infected lymphocytes. A randomized control trial of these vaccines will be performed in study participants who started ART within six months of their HIV infection. The primary objective of the study will be to determine if participants in the vaccine arm have more instances of detectable cell-associated HIV RNA than the placebo group.

Role: Statistician

U01 HL122272, NHLBI, PI: May 08/15/2015 – 05/31/2020
Trial Using Epsilon Aminocaproic Acid Therapy in Thrombocytopenia - DCC

This study will change practice by providing evidence as to whether EACA is effective and safe when used as an adjunct to platelet transfusion therapy. This award is for the Data Coordinating Center for this multicenter randomized clinical trial.

Role: Statistician, PI starting 01/07/2017

5UH2/3HL125163-02, NHLBI, PI: Wang 09/19/2014 – 07/31/2019
Pragmatic Trial of Airway Management in Out-of-Hospital Cardiac Arrest

Using the North American Resuscitation Outcomes Consortium, we will conduct a multicenter pragmatic randomized clinical trial comparing ETI- versus SGA-airway management upon 72-hour survival in adult OHCA.

Role: Statistician and PI of the Data Coordinating Center

OPP1105080, Bill and Melinda Gates Foundation 07/01/2014 – 06/30/2019
PI: A. Ginsburg, Save the Children

Building the evidence base for appropriate and effective treatment of childhood pneumonia, evaluating the effectiveness of 3 days versus 5 days twice daily amoxicillin dispersible tablets therapy

This project includes two double-blind randomized controlled clinical trials of amoxicillin DT for childhood pneumonia among children 2-59 months of age presenting to Kamuzu Central Hospital in Lilongwe, Malawi. One of the trials compares three days of amoxicillin DT versus placebo for fast-breathing childhood pneumonia. The other compares five days of amoxicillin DT versus three

days of amoxicillin DT for chest-indrawing pneumonia. For each study it is planned that 2000 children (4000 total, and 1000 per group within each study) are enrolled. Role: Statistician

5R01HL117979-03, NHLBI, PI: Menegazzi 06/1/2014 – 05/31/2018
Utilization of Quantitative ECG Measures During Cardiopulmonary Resuscitation
1. Plan and implement a system for transferring ECGs to and from the University of Pittsburgh group. 2. Verify and validate the processes used by Pittsburgh to analyze the ECG data. 3. Collaborate with the Pittsburgh group and ROC investigators to design and implement analyses utilizing the ECG data to monitor and evaluate the effect of study therapies on the ECG parameters.
Role: Statistician

ERMS# 13335004, Department of Defense, PI: S. May 09/30/2013 – 09/29/2018
Prehospital Tranexamic Acid Use for Traumatic Brain Injury
Clinical trial (in conjunction with ROC) of the use of Tranexamic Acid in patients with Traumatic Brain Injury Role: PI

UO1 HL077863-07S2, NHLBI, PIs: S. May / G. Van Belle 10/01/2010 – 09/30/2018
Resuscitation Outcomes Consortium (ROC) Data Coordinating Center
The Resuscitation Outcomes Consortium (ROC) will conduct the Prospective, Randomized, Optimal Platelet and Plasma Ratios (PROPPR) Phase III trial to compare 24-hour and 30-day mortality (co-primary outcomes) in 580 subjects receiving differing blood product ratios.
Role: Multiple PI with Dr. Gerald van Belle

UO1 HL077863, NHLBI, PI: S. May 09/01/2004 – 12/31/2018
Resuscitation Outcomes Consortium (ROC) Data Coordinating Center
To improve outcomes in patients with out-of-hospital cardiac arrest and life threatening traumatic injury by providing collaboration, coordination, administration and support to regional clinical centers, sponsors and oversight bodies. To design and implement a series of high-quality randomized trials that have optimal internal and external validity. To rapidly disseminate the methods and the results of these trials to the research and clinical practice community so as to improve resuscitation outcomes.
Role: Principal Investigator (since Feb 2011) and Statistician (since Sept 2008)

PO1 A1074621: NIAID, PI: S. Little 03/01/2008 – 02/28/2013
Determinants of HIV Transmission
To estimate R_0 and to investigate biologic, viral and host correlates of transmission Role: Co-Investigator, Statistician

P30 AI036214: NIH, PI: D. Richman 07/01/2003 – 08/31/2008
Center for AIDS Research (CFAR)
To develop improved vaccines and therapies for HIV infection and associated diseases.
Role: Statistician

RO1 MH058076: PI: R. Ellis 09/28/2006 – 08/31/2008
A Randomized Clinical Trial of CNS-Targeted HAART

To evaluate the efficacy of a CNS-targeted antiretroviral treatment strategy for individuals with HIV-associated neurocognitive impairment in a multicenter clinical trial.

Role: Statistician, Co-Investigator

P50 AG05131: NIH, PI: D. Galasko 04/01/2004 – 08/31/2008

Alzheimer's Disease Research Center

To examine the medical, neurological and neuropsychological characteristics of patients with AD.

Role: Statistician, Co-Investigator

RO1 NS042584: NIH, PI: D. Trauner 02/01/2003 – 08/31/2008

Neuro-cognitive Outcome After Early Focal Brain Damage

To evaluate the role of seizures and epileptiform brain activity on cognitive function in children with early focal brain damage.

Role: Statistician, Co-Investigator

PO1 NS04423: NIH, PI: S. May 03/01/2003 – 08/31/2008

Pathogenesis and Diagnosis of Multiple System Atrophy

Total funding for 5 years ~ \$ 7,000,000

To study pathogenic factors for Multiple System Atrophy, particularly the role that α -synuclein plays, and to evaluate and refine clinical and laboratory assessments used to diagnose and follow the course of the illness.

Role: Project PI (after PI's death in February 2007) and Director of Data Core

NO1 MH22005: NIH, PI: I. Grant 09/10/2002 – 08/31/2008

CNS HIV Anti-Retroviral Therapy Effects Research

To assess the long-term effects of potent anti-retroviral therapy on HIV-induced disease of the nervous system.

Role: Statistician

UO1 AI43638: NIAID, PI: D. Richman 06/01/1998 – 09/30/2007

Southern California Primary Infection Program

To conduct clinical and research studies in primary HIV infection. Role: Statistician

P01AG020206, NIA, PI: Koo 04/01/2002 – 02/28/2007

Novel mechanisms of NSAID action in Alzheimer disease

Major goals: The objective is to pursue a novel mechanism of action of non-steroidal antiinflammatory drugs (NSAIDs) in Alzheimer's disease (AD), the most common form of age-related dementing illness.

Role: Statistician

R01 NS43135, NINDS, PI: Trauner 09/01/2003 – 06/30/2008

Brain Structure and Cognition in Cystinosis

This study provides the potential for understanding the role of early metabolic and genetic dysfunction on subsequent brain development, both structural and functional, and for

determining whether the presence of the metabolic disorder can produce a progressive deleterious effect on brain function. Role: Co-Investigator

R24 HD050837, PI: Kalunian 03/01/2006 – 28/02/2007
Planning grant for a trial regarding the efficacy of embrel (an TNF-receptor) for inflammatory knee osteoarthritis. Role: Statistician

R01AG12963, NIA, PI: Salmon 09/30/1994 – 01/31/2006
Cognitive Studies of the Lewy Body Variant of Alzheimer's Disease
Major goals: This study examines the cognitive deficits associated with the Lewy body variant of Alzheimer's Disease and the relationship between these deficits and neuropathological findings.
Role: Statistician

R03HL70311, NIH, PI: Barrett-Connor 04/01/2000 – 03/31/2004
Endogenous/Exogenous Sex Hormones & CHD Risk Factors
Major goals: The major goal is to determine interactions of endogenous sex hormone levels, hormone replacement therapy, and CHD risk factors in determining CHD risk in postmenopausal women.
Role: Statistician

10. Public Health Practice Activities

None indicated.

11. Conferences and Symposiums (Organization, Contributed Oral Presentations, Invited Oral Presentations and Seminars) [Meeting presentations made by preceptees]; like items grouped; mark invited presentations with an asterisk

Presentations/Workshops/Tutorials

- 1997 Meeting of the American Society for Bone and Mineral Research, Cincinnati, OH, Sept 12 (poster presentation). "Recognition of Vertebral Fracture in a Clinical Setting".
- 1998 ENAR/IMS Meeting, Pittsburgh, PA, March 24 (oral presentation). "A simplified method of calculating an overall goodness-of-fit test for the Cox proportional Hazards Model"
- 2000 ENAR/IMS Meeting, Chicago, IL, March 22 (oral presentation). "An Added Variable Goodness-of-Fit Test for the Cox Proportional Hazards Model"
- 2000* XVI International Congress of the European Federation for Medical Informatics and 45. Annual Meeting of the German Association for Medical Informatics, Biometry and Epidemiology, Hanover, Germany August 21 (tutorial). "Epidemiology of small risks"
- 2002 UCSD, Division of Biostatistics, June 6, (invited presentation) "Added Variables Goodness-of-Fit Tests for the Cox Proportional Hazards Model"
- 2002 XXI International Biometric Conference, Germany July 6 (poster presentation). "A tractable approach to determining the degrees of freedom for some goodness-of-fit statistics for the Cox proportional hazards model"
- 2003* New Researchers Conference, Davis, CA Aug 25 (invited presentation). "A tractable approach to determining the degrees of freedom for some goodness-of-fit statistics for the Cox proportional hazards model."

- 2004* San Diego State University, Department of Mathematics and Statistics, February 20 (invited presentation). “Hosmer and Lemeshow type goodness-of-fit tests for the Cox PH model”.
- 2004 San Diego American Statistical Association One-Day-Conference, February 27 (oral presentation). “Hosmer and Lemeshow type goodness-of-fit tests for the Cox PH model”
- 2004* Methods Seminar presentation, UCLA Center for Community Health, May 24 (invited presentation). “Hosmer and Lemeshow type goodness-of-fit tests for the Cox PH model”
- 2004 WJAR/IMS meeting, Albuquerque, NM, June 28 (oral presentation). “Hosmer and Lemeshow type goodness-of-fit tests for the Cox PH model”
- 2004* UCLA, Department of Biostatistics, December 6 (invited presentation). “Hosmer and Lemeshow type goodness-of-fit tests for the Cox PH model”.
- 2005 Division of Biostatistics Meeting, February 16, Science Session presentation. “Nonparametric tests for dependent observations obtained at varying time points”
- 2005 ENAR/IMS meeting, Austin, TX, March 21 (oral presentation). “Nonparametric tests for dependent observations obtained at varying time points”
- 2006* UCLA, Department of Biostatistics, May 31 (invited presentation). “Nonparametric tests for two group comparisons of dependent observations obtained at varying time points”
- 2006 International Biometric Conference, July 18 (oral presentation). “Nonparametric tests for two group comparisons of dependent observations obtained at varying time points”
- 2006 San Diego American Statistical Association One-Day-Conference, November 17 (oral presentation). “Nonparametric tests for two group comparisons of dependent observations obtained at varying time points”.
- 2007* Joint Statistical Meetings, Salt Lake City, UT, August 1, (invited presentation) “Nonparametric tests for two group comparisons of dependent observations obtained at varying time points (with application to RNA viral load decline)”
- 2007* *Current and Future Trends in Nonparametrics*, Columbia, SC, Oct 12, invited presentation. “Nonparametric tests for two group comparisons of dependent observations obtained at varying time points (with application to RNA viral load decline)” 2007* Medical University Hanover, Germany, Nov 26, invited presentation. “Nichtparametrische Tests für den Vergleich von zwei Gruppen mit abhängigen Beobachtungen die an unterschiedlichen Zeitpunkten erfasst werden”
- 2008* Ohio State University, OH, Jan 18, invited presentation. “Nonparametric tests for two group comparisons of dependent observations obtained at varying time points with application to RNA viral load decline”
- 2008* University of Washington, Seattle, WA, Feb 14, invited presentation. “Nonparametric tests for two group comparisons of dependent observations obtained at varying time points with application to RNA viral load decline”
- 2008* One-day workshop, Chicago Chapter of the American Statistical Association, March (invited presentation) “Applied Survival Analysis”
- 2008* *Annual ENAR/IMS meeting*, Arlington, VA, March 19, oral presentation. “Goodness-of-fit testing for the Cox proportional hazards model with time-dependent covariates”
- 2008* One-day workshop in “Applied Survival Analysis”, ASA Kansas/Missouri Chapter, October, invited presentation.
- 2009* International Workshop on Multiple System Atrophy, Feb 19-20, Tokyo, Japan, invited presentation. “Web based data management system and statistical challenges of MSA research”
- 2009* *Annual ENAR/IMS meeting*, San Antonio, TX, March 17, oral presentation. “Pooled Nucleic Acid Testing to Identify Antiretroviral Treatment Failure”

- 2009* University of Washington, CHSCC, Works in progress seminar series, April 3, invited presentation. "Pooled Nucleic Acid Testing to Identify Antiretroviral Treatment Failure"
- 2010* Kansas State University, Conference on Applied Statistics in Agriculture, Workshop leader "Applied Survival Analysis" and keynote speaker "Challenges of Applied Survival Analysis and Applied Statistics in General", April 25-27, invited presentation.
- 2010 AHA – ReSS, Chicago, November 14, poster presentation. "Challenges of standardization in evidence-based medicine with particular emphasis on out-of-hospital research"
- 2011* Columbia, New York, May 12, invited presentation. "Pooling and Futility Boundaries Chicken Soup and Ketchup?"
- 2011 *Annual Society for Clinical Trials meeting*, Vancouver, BC, Canada, May 17, oral presentation, "Potential Dangers of Inappropriate Futility Boundaries"
- 2011* *Annual WNAR/IMS meeting*, San Louis Obispo, CA, June 21, invited presentation, "Potential Dangers of Inappropriate Futility Boundaries"
- 2012* ASA Traveling Course, One-day workshop in "Applied Survival Analysis", ASA Chesapeake/Delaware Chapters, May 10.
- 2012* ASA Traveling Course, One-day workshop in "Applied Survival Analysis", ASA Philadelphia Chapter, May 11.
- 2012* ASA Traveling Course, One-day workshop in "Applied Survival Analysis", ASA NE Illinois Chapter, May 30.
- 2012* One-day workshop in "Applied Survival Analysis", Center for Disease Control, Atlanta, June 4.
- 2012* ASA Traveling Course, One-day workshop in "Applied Survival Analysis", ASA San Diego Chapter, September 11.
- 2012* SDSU, Department of Statistics, Seminar, September 12, invited presentation, "Pooling and Futility Boundaries"
- 2013* University of Washington, Seattle, WA, Feb 28, Department of Biostatistics seminar. "The rise and fall of hypertonic saline (with sugar on top)"
- 2013* Fred Hutchinson Cancer Center, clinical trials working group seminar, April 22. "The rise and fall of hypertonic saline (with sugar on top)"
- 2014 Society for Research on Nicotine and Tobacco, Seattle, WA Feb 6, 2014 (poster presentation) "Estimating the Health Effects of Alternative Tobacco Products: Avoiding the Wrong Mistake".
- 2014* GlaxoSmithKline, Two half-day workshops in "Applied Survival Analysis", Durham, NC. March 31 and April 1.
- 2014 *Annual Society for Clinical Trials meeting*, Philadelphia, PA, May 19, oral presentation, "Type I error control in factorial non-inferiority trials".
- 2014* Erasmus Summer Programme, Rotterdam, Netherlands, "Clinical Trials", August 11-15.
- 2014* University of Washington, Institute for Translational Health Sciences, Certificate in Translational Team Science Bootcamp, "Pragmatic Clinical Trials", September 19.
- 2015* Erasmus Summer Programme, Rotterdam, Netherlands, "Clinical Trials", August 10-14.
- 2015* Kansas-Missouri ASA Chapter, Workshop on Clinical Trials and seminar presentation, October 29.
- 2016* University of North Carolina (invited presentation), "Pooling Methods and some Issues with Non-Inferiority Designs", March 22.
- 2016* Washington University, St. Louis (invited presentation), "Pooling Methods and some Issues with Non-Inferiority Designs" April 6.
- 2017* FDA (invited presentation), "The rise and fall of hypertonic saline (with sugar on top) and Type I Error Control in Factorial Non-Inferiority Designs", August 4.

Podcasts

Neurology, Subject: Cox Proportional Hazards Model, July 29, 2008, invited presentation
Neurology, Subject: Spearman and Pearson Correlation Coefficient, 2009, invited presentation

Chair/Organizer/Moderator

- 2005 ENAR/IMS meeting, Austin, TX, March 22, chairing session: Semiparametric and nonparametric modeling
- 2009 ENAR/IM meeting, San Antonio, TX, March 17, chairing session: Inference for clinical trials
- 2010 JSM, Vancouver, BC, Canada, August 3, chairing session: Computing and Graphics Software
- 2011 *Annual WNAR/IMS meeting*, San Louis Obispo, CA, June, organizing and chairing invited session: Ethics: white, black, gray or colorful
- 2013 *Annual WNAR/IMS meeting*, University of California, Los Angeles, June, chairing session: Statistical Inference: Efficiency and Calibration
- 2013 Resuscitation Science Symposium of the American Heart Association, November 16, Dallas, TX, co-moderated *Session V: Resuscitation Devices*
- 2016 IBS/WNAR, Victoria, BC, Canada, chairing session: Survival Analysis 5, July 15.
- 2017 WNAR, Santa Fe, organizing and chairing New Investigator's Lunch: "Growing as a (bio)statistician - things you can't learn from books".

12. University Service (list entire history; Activity, Dates, [Role])

UCSD

Campus

- Member, Women in Science and Engineering Committee, Dec 2004 – Aug 2008
- Co-Chair, Women of Science and Engineering Committee, Sept 2007 – Aug 2008
- Member, Chancellor's Advisory Committee on the Status of Women, Sept 2007 – Aug 2008

School of Medicine

- Consultant to the Institutional Grant Review Committee, Feb 2005 – Aug 2008
- Alternate department (FPM) representative to the academic senate, Sept 2006 – Aug 2008

Department of Family and Preventive Medicine

- Member, Finance Committee, May 2005 – Aug 2008

Department of Neurosciences

- Member, Organizing Committee, Scientific Symposium in Honor of Clifford Shults, MD, Spring 2007
- Member, Search Committee, Fall 2007 – Aug 2008

Division of Biostatistics and Bioinformatics

- Member, Graduate Program Committee, Aug 2003 – Aug 2008
- Co-chair, Seminar series, 2004 – 2005
- Co-chair, Weekly division meetings including Science Sessions, 2004 – 2005
- Member, Web Committee, Fall 2005
- Member, Search Committee, April 2005 – Aug 2008

Other

Ad-hoc member, HIV Neurobehavioral Research Center Developmental Grant Committee,
Sept 2007 – Aug 2008

UW

Student/Faculty relations committee, Chair, 2008 – 2017
Admission committee, Member, 2008 – 2010
Search committee, Member, Spring 2009
Search committee, Member, Fall 2009
Applied Exam committee, Member, 2009 – 2011
Search committee, Member, 2012
Department of Biostatistics Self-study, Committee Member, 2012
Department of Biostatistics MS degree, Committee Member, 2013
Search committee, Member 2013
Chair review committee, Member 2013
Advisory Search Committee for the Chair, Dept of Biostatistics, Member, 2013/2014
Staff/Faculty relations committee, Member, 2013/2014
SOM/SPH task force for MSCR degree, Member, 2016 – 2017
Faculty Search Committee, Member 2016 – 2017
Faculty Council Alternate Representative 2017 – present
Student/Staff/Faculty relations committee, Chair, 2018 – present

13. Professionally- Related Community Service

IBS Volunteer Editor Program, Member, 2007 – present

14. Other Pertinent Information

None indicated.

15. Teaching History (list entire history at the UW as well as previous institutions, if applicable:

Title, Number of Students, Role, % Responsibility, Dates)

15a) Formal Courses, including Distance Learning

Biostat 406, Applied Multivariate Biostatistics, UCLA, 2001, 2002, 100% responsible, average of 50 students
Neu 225, Statistical Methods and Experimental Design, UCSD, 2003 – 2007, 100% responsible, average of 18 students
Biost 524, Design of Medical Studies, UW, 2011, 50% responsible (co-taught with Dr. Scott Emerson), ~30 students
Biost 512, Medical Biometry II, UW, 2013, 50% responsible (co-taught with Dr. Barbara McKnight), ~ 140 students, including ~20 Distance Learning Students
Biost/Epi 537, Survival Data Analysis in Epidemiology, UW, 2014, 100% responsible, ~40 students, including 7 Distance Learning Students
Biost/Epi 537, Survival Data Analysis in Epidemiology, UW, 2015, 100% responsible, ~40 students
Biost 513, Medical Biometry III, UW, 2017, 100% responsible, ~90 students, including ~25 Distance Learning Students

Biost 513, Medical Biometry III, UW, 2018, 100% responsible, ~100 students, including ~25 Distance Learning Students

Biost 513, Medical Biometry III, UW, 2019, 100% responsible, ~100 students, including ~25 Distance Learning Students

15b) Other Teaching (Guest Lectures, Continuing Education, Clinical Teaching, etc)

Guest lectures at UCSD, SOM218, Epidemiology and Biostatistics, 2003 – 2006

Guest lectures at UW, HSERV 525, Spring 2009, 2010

Guest lectures at UCSD, Clinical Trials Class, Feb, 2010, 2011

Guest lecture at UW, Biost 579, Winter 2010

Guest lecture at UW, Biost 524, Winter 2010

Guest lecture at UW, Biost 111, Spring 2013

Guest lecture at UW, Biost 537, Winter 2016

Guest lecture at UW, ITHS, Fellows program October 30, 2017

Summer Institute in Biostatistics: Clinical Trials, Introduction to Survival Analysis 2012, 2013 (co-taught with Dr. Barbara McKnight) Summer Institute in Biostatistics 2014:

Introduction to Clinical Trials (one-day, co-taught with Dr. Dan Gillen)

Introduction to Survival Analysis (one-day, co-taught with Dr. Barbara McKnight)

Summer Institute in Biostatistics 2015:

Introduction to Clinical Trials (two-days, co-taught with Dr. Dan Gillen)

Introduction to Survival Analysis (two-days, co-taught with Dr. Barbara McKnight)

Summer Institute in Biostatistics 2016:

Introduction to Clinical Trials (two-days, co-taught with Dr. Dan Gillen)

Survival Analysis in Clinical Trials (one-day, co-taught with Dr. Barbara McKnight)

Summer Institute in Biostatistics 2017 and 2018:

Introduction to Clinical Trials (two-days, co-taught with Dr. Dan Gillen)

Survival Analysis in Clinical Trials (three-days, co-taught with Dr. Barbara McKnight)

15c) Independent Study (give students' names instead of course title, if appropriate)

ISP Kevin Guber, UCSD, Member of ISP committee, 2003 – 2006

Laurel Imhoff, UCSD, Member of ISP committee, 2005 – 2006

16. Advising and Formal Mentoring (list entire history; Student Name, Year, Role (e.g., Chair or Committee Member))

16a) PhD Dissertations, Chair

Brett Hanscom, Co-chair with Jim Hughes, 2011 – 2014

“Biostatistical Methods for HIV Monitoring and Prevention”

David Prince, Chair, 2013 – 2016

“Searching for Predictive Subgroups”

16b) Masters Theses, Chair

Shannon Grant UW, Biostatistics, 2009
 “Performance of Goodness-of-Fit Tests for the Cox Proportional Hazards Model with Time-Varying Covariates”

Danielle Guffey UW, Biostatistics, 2011-2012
 “Hosmer-Lemeshow Goodness-of-Fit Test: Translations to the Cox Proportional Hazards Model”

Danny Szydlo UW, Biostatistics, 2011 – 2012
 “Statistical Analysis in the Presence of Sparse Data and Other Complications Associated with Alternative Tobacco Product Research”

Erin Case UW, Biostatistics, 2013 – 2014
 “A Comparison of Sample Size Calculations for Cluster Randomized Crossover Trials with a Binary Outcome”

Erika Thommes UW, Biostatistics, 2014 – 2015
 “An Evaluation of Flexible Summary Measures for the Comparison of Binary Outcomes in Non-Inferiority Trials”

Minkyu Kim, UW, Biostatistics, 2014 – 2015
 “The impact of the violation of the proportional hazards assumption on confirmatory analysis of survival data using delayed entry”

Adam Brand, UW, Biostatistics, 2015 – 2016
 “Pooled Testing Methods for Detecting Viral Load Failure in HIV Patients”

Yanshu Guo, UW, Biostatistics, 2016 – 2017
 “Effect of Time Measurement Error on Assessing Treatments with Time Dependent Effect”

Lei Wang, UW, Biostatistics, 2016 – 2017
 “Searching for Predictive Subgroups with Enhanced Treatment Effect in Clinical Trials using SHAPES”

16c) Mentored Scientists and Post-Docs

None

16d) MS and PhD Committees in Non Chair Role

Ph.D. Gail Laughlin UCSD, Member of Dissertation committee, Epi, 2003 – 2006
 Judith Harbertson UCSD, Member of Dissertation committee, Epi, 2007 – 2010
 Shanshan Zhao UW, Member of Dissertation committee, Biostatistics, 2010 – 2012
 Greg Levin UW, Member of Dissertation committee, Biostatistics, 2011 – 2012
 Elizabeth Teeple UW, Member of Dissertation committee, Biostatistics, 2010 – 2013
 Luis Crouch UW, Member of Dissertation committee, Biostatistics, 2013
 Laura Yee UW, Member of Dissertation committee, Biostatistics, 2013 – 2014
 Wei Zhao UW, Member of Dissertation committee, Biostatistics, 2013 – 2014
 Emily Mosites UW, Member of Dissertation committee, Epidemiology, 2013 – 2015
 Leila Zelnick UW, Member of Dissertation committee, Biostatistics, 2014 – 2015
 William Koh UW, Member of Dissertation committee, Biostatistics, 2014 – 2016
 Rachel Silverman UW, Member of Dissertation committee (GSR), Epidemiology, 2016 – 2018

Cesar Torres UW, Member of Dissertation committee, Biostatistics, 2017 – 2018
Emily Deichsel UW, Member of Dissertation committee (GSR), Epidemiology, 2016 – 2018

Jeremy Roth UW, Member of Dissertation committee, Biostatistics, 2018 – 2019

Brenda Price UW, Member of Dissertation committee, Biostatistics, 2016 – present

William Tressel UW, Member of Dissertation committee, Biostatistics, 2017 – present

Andrew Humbert UW, Member of Dissertation committee, Biostatistics, 2018 – present

Soojeong Han UW, Member of Dissertation committee (GSR), Nursing, 2018 – present

MS Kate Zhou SDSU, Member Thesis committee, Math/Stat, 2003 – 2004

Ying Yang SDSU, Member Thesis committee, Math/Stat, 2004 – 2005

Lixia Zhu SDSU, Member Thesis committee, Math/Stat, 2005 – 2006

Arthur Baines UW, Member Thesis committee, Biostatistics, 2013

Brittany Sanchez UW, Member Thesis committee, Biostatistics, 2013 – 2014

Linyu Li UW, Member Thesis committee, Biostatistics, 2016

16e) Other Mentoring (Undergraduate Research, Medical School ISMS Projects, etc.)

Tanya Granston, Research Assistant, UW

Siobhan Everson-Stewart, Research Assistant at ROC, UW

Elizabeth Thomas, Research Assistant at ROC, UW

Luis Crouch, Research Assistant at ROC, UW

Erin Gabriel, Research Assistant at ROC, UW

Danielle Guffey, Research Assistant at ROC, UW

Brittany Sanchez, Research Assistant at ROC, UW

Sean Devlin, Research Assistant at ROC, UW

Eric Meier, Research Assistant at ROC, UW

Danny Szydlo, Research Assistant at ROC, UW

Andrew Humbert, Research Assistant at ROC, UW

William Tressel, Research Assistant at ROC, UW

Cesar Torres, Research Assistant at ROC, UW

Michael Flanagan, Research Assistant at ROC, UW

David Prince, Research Assistant at ROC, UW

Ashley Peterson, Research Assistant at ROC, UW, 9/2011-3/2016

Rui Zhang, Independent Study, UW

Asad Haris, Research Assistant, UW, Fall 2017

Emily Voldal, Independent Study, UW, Winter-Summer 2018

Sijia (Lucy) Li, Independent Study, UW, Winter-Fall 2018

Xiudi Li, Research Assistant, UW, Spring 2018 – present

Si Cheng, Research Assistant at ROC, UW, Fall 2018

Kun Yue, Independent Study, UW, Summer 2018, Winter 2019 - present

16f) Academic Advising

David Benkeser, 2010 – 2013

Sooraj Kuttykrishnan, 2011 – 2013
Natalie Gasca, 2014 – 2016
Qijun (Kendrick) Li, 2016 – present
Hyunju So, 2016 – present