# CURRICULUM VITAE

# Jonathan S. Schildcrout, Ph.D.

Updated: May 4, 2016

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# **EDUCATION**

1994 BS in Mathematics, Minor in Biology, Certificate in Environmental Science, Indiana

University, Bloomington, Indiana.

1996 MS in Biostatistics, University of North Carolina, Chapel Hill, North Carolina.

2004 PhD in Biostatistics, University of Washington, Seattle, Washington.

### ACADEMIC APPOINTMENTS

2011 — Associate Professor, Department of Biostatistics, Vanderbilt University School of Medicine.

2011 — Associate Professor, Department of Anesthesiology, Vanderbilt University School of

Medicine.

2004–2011 Assistant Professor, Department of Biostatistics, Vanderbilt University School of Medicine.

2009–2011 Assistant Professor, Department of Anesthesiology, Vanderbilt University School of

Medicine.

# AWARDS AND HONORS

2015 Golden Apple Award for Excellence in Teaching, Vanderbilt University, Department of

Biostatistics.

2002–2004 NIH Cardiovascular Training Grant, University of Washington, Department of Biostatis-

tics.

1994–1996 NICHD Demography Training Grant, University of North Carolina, Department of Bio-

statistics.

# **EMPLOYMENT**

1998–2004 Graduate Research Assistant, Department of Biostatistics, University of Washington

1996–1998 Clinical Trials Statistician, Duke Clinical Research Institute

1995–1996 Graduate Research Assistant, Department of Biostatistics, University of North Carolina

# PROFESSIONAL ORGANIZATIONS

2015– Society for Epidemiologic Research 2014– Society for Medical Decision Making

2004 — International Biometric Society, East North American Region

2002– American Statistical Association

President, Middle Tennessee Chapter (2006–2008) Treasurer, Middle Tennessee Chapter (2005–2006)

2002–2004 International Biometric Society, West North American Region

### PROFESSIONAL ACTIVITIES

#### Intramural

Committees Applied PhD comprehensive exam committee, Department of Biostatistics (2013–)

Faculty Affairs Promotion Committee, Department of Biostatistics (2010–) Graduate Admissions Committee, Department of Biostatistics (2010–2015) Clinical Research Committee, Department of Anesthesiology (2009–2013) Research Executive Committee, Department of Anesthesiology (2009–2013)

Graduate Program Committee, Department of Biostatistics (2009–) Faculty Search Committee, Department of Biostatistics (2005–) MS Staff Search Committee, Department of Biostatistics (2005–2012)

Biostatistics Seminar Series, Department of Biostatistics, Organizer (2005–2007) MS Time Allocation Committee, Department of Biostatistics (2005–2007)

DSMB Inflammation and Insulin Resistance in Rheumatoid Arthritis (C. Michael Stein, P.I.)

(2009–Present)

Modifying the Incidence of Delirium (MIND) study (Wes Ely, P.I.) (2005–2006)

Study Sections Vanderbilt Edge for Scholars Study Section (1/2012, 9/2012, 5/2014, 9/2015)

Vanderbilt Clinical and Translational Research Scholar Program (VCTRS) and Vanderbilt Physician Scientist Development Program (VPSD) selection committee (2012)

Other service Vanderbilt University Faculty Senate member (2015–) Topping off award review commit-

tee, Vanderbilt University (2015)

#### Extramural

Editorial Associate Editor, Journal of the Royal Statistical Society - C (2015–)

Ad hoc reviewer American Journal of Epidemiology (2008-2010, 2014), American Journal of Respiratory

and Critical Care Medicine (2012-2015), Anaesthesia (2014), Anesthesia and Analgesia (2012,2013), Annals of Epidemiology (2014), Australian and New Zealand Journal of Statistics (2006, 2014), Biometrics (2006, 2009-2012, 2015), Biostatistics (2008, 2010), BMC Medical Research Methodology (2014,2015), Canadian Journal of Statistics (2013, 2014), Computational Methods in Biomedical Research (2006), Computational Statistics (2007), Computational Statistics and Data Analyses (2013), Environmental Health Perspectives (2008), Epidemiology (2009, 2015), Journal of the American Statistical Association (2009-2010, 2012), Journal of Applied Statistics (2007,2015), Journal of Occupational and Environmental Health (2005), Journal of the Royal Statistical Society - Series A (2013), Journal of the Royal Statistical Society - Series B (2012), Journal of the Royal Statistical Society - Series C (2009, 2012,2015-2016), Journal of Statistical Computation and Simulation (2016), Methods in Ecology and Evolution (2015,2016), Methods of Information in Medicine (2007-2008), METRON - International Journal of Statistics (2008), Pediatrics (2009), PLOS One (2015,2016), Scandinavian Journal of Statistics (2012), Statistics in Medicine (2005-2015), Statistical Methods in Medical Research (2007)

Advisory Panel American Chemistry Council Working Group on Biomarker Research, organized by

NICHD/NIH (2010–2011)

American Chemistry Council Working Group on Study Designs for Longitudinal Data,

organized by NICHD/NIH (2015–2016)

Study Section NIDDK Special Emphasis Panel to review Type 1 diabetes applications (March 2012;

PAR 11-349)

Biostatistical Methods and Research Design (BMRD) ad hoc referee (Feb 2016)

Program Chair Program Co-Chair, East North American Region of the International Biometric Society,

Washington, DC (April 2012).

Biometrics Section Program Chair, Joint Statistical Meetings, Boston MA (August 2014).

Conferences Roundtable Organizer, Recent Advances in Joint Models for Longitudinal and Time-to-

Event Data by Dimitris Rizopoulos, Montreal, Canada. (August 2013) Session Organizer and Chair, Biased Epidemiological Study Designs, Joint Statistical

Meetings, Montreal, Canada. (August 2013)

Session Organizer and Chair, Beyond the Case-Control Study: Efficient (and underutilized) Epidemiological Study Designs, Joint Statistical Meetings, Miami Beach, FL. (August 2012)

Session Chair, Statistical Methods, International useR! Conference, Nashville, TN (June 2012)

Session Organizer, Outcome Dependent Sampling for Correlated / Longitudinal Data, Joint Statistical Meetings, Miami Beach, FL. (August 2011)

Session Organizer and Chair, Outcome Dependent Sampling, Joint Statistical Meetings, Seattle, Washington. (August 2009)

Session Organizer and Chair, Quantitative Safety Assessment, Midwest Biopharmaceutical Statistics Workshop, Muncie, Indiana (May 2009)

Session Organizer and Chair, Data Mining Tools and Resources, Midwest Biopharmaceutical Statistics Workshop, Muncie, Indiana (May 2007)

Session Chair, Analysis of Correlated Data and Mixed Models, Joint Statistical Meetings, Seattle, Washington (August 2006)

### TEACHING ACTIVITIES

Courses Advanced Regression Analysis and Correlated Data Analysis, Vanderbilt University, Department of Biostatistics (Spring 2013-2016).

> Graduate Teaching Assistant, University of Washington, Department of Biostatistics, Categorical Data Analysis in Epidemiology (2004).

> Graduate Teaching Assistant, University of Washington, Department of Biostatistics, Classical Theory of Linear Models (2002).

> Graduate Teaching Assistant, University of North Carolina, Department of Biostatistics, Basic Elements of Probability and Statistical Inference (1995).

> Undergraduate Teaching Assistant, Indiana University, Department of Mathematics, Brief Survey of Calculus (1993-1994).

> Undergraduate Teaching Assistant, Indiana University, Department of Mathematics, Basic Algebra (1992).

> Marginal and Conditional Modeling of Longitudinal Binary Response Data, Vanderbilt Department of Biostatistics (August 2005).

> Flexible longitudinal regression modeling of clinical lab data for early detection of drug toxicity, Vanderbilt Department of Biostatistics (May 2006).

> A nested case-control design for longitudinal data, Vanderbilt Department of Biostatistics (March 2007).

> A nested case-control design for longitudinal data, Vanderbilt Epidemiology Center (April 2007).

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Seminars

Longitudinal Data Analysis following Case-Control Sampling with Application to an eight year ADHD Study in Children, Vanderbilt Epidemiology Center (November 2008).

Longitudinal studies of binary response data following case-control and stratified case-control sampling, Vanderbilt Department of Biostatistics (July 2009).

Analyses of longitudinal, hospital clinical laboratory data with application to blood glucose concentrations , Vanderbilt Department of Biostatistics (May 2011).

Optimizing drug outcome through pharmacogenetics: A case for preemptive genotyping, Staff Retreat, Vanderbilt Department of Biostatistics (May 2012).

Optimizing drug outcome through pharmacogenetics: A case for preemptive genotyping, Grand Rounds, Vanderbilt Department of Anesthesiology (June 2012).

More Bang for Less Bucks: High Powered Epidemiologic Study Designs for Longitudinal Data, Vanderbilt Epidemiology Center (Oct 2013)

More Bang for Less Bucks: High Powered Epidemiologic Study Designs for Longitudinal Data, Vanderbilt Center for Health Services research (Nov 2013)

Development and implementation of a predictive model for preemptive pharmacogenetic testing, Vanderbilt Department of Biostatistics (November 2013).

Development and implementation of a predictive model for preemptive pharmacogenetic testing, Vanderbilt Department of Biomedical Informatics (September 2014).

### PUBLICATIONS and PRESENTATIONS

### **Publications**

Peer-Reviewed Papers

- Mixon AS, Goggins K, Bell SP, Vasilevskis EE, Nwosu S, Schildcrout JS, et al. Preparedness for hospital discharge and prediction of readmission. J Hosp Med. 2016 Feb;.
- 2. Billings FT, Hendricks PA, **Schildcrout JS**, Shi Y, Petracek MR, Byrne JG, et al. High-Dose Perioperative Atorvastatin and Acute Kidney Injury Following Cardiac Surgery: A Randomized Clinical Trial. JAMA. 2016 Mar;315(9):877–888.
- 3. Peterson JF, Field JR, Unertl K, **Schildcrout JS**, Johnson DC, Shi Y, et al. Physician response to implementation of genotype-tailored antiplatelet therapy. Clin Pharmacol Ther. 2015 Dec;.
- 4. **Schildcrout JS**, Shi Y, Danciu I, Bowton E, Field JR, Pulley JM, et al. A prognostic model based on readily available clinical data enriched a pre-emptive pharmacogenetic testing program. J Clin Epidemiol. 2016 Apr;72:107–115.
- 5. Leak C, Goggins K, **Schildcrout JS**, Theobald C, Donato KM, Bell SP, et al. Effect of Health Literacy on Research Follow-Up. J Health Commun. 2015 Oct;20(sup2):83–91.
- 6. Kripalani S, Goggins K, Nwosu S, **Schildcrout J**, Mixon AS, McNaughton C, et al. Medication Nonadherence Before Hospitalization for Acute Cardiac Events. J Health Commun. 2015 Oct;20(sup2):34–42.
- 7. **Schildcrout JS**, Rathouz PJ, Zelnick LR, Garbett SP, Heagerty PJ. Biased sampling designs to improve research efficiency: factors influencing pulmonary function over time in children with asthma. Ann Appl Stat. 2015 Jun;9(2):731–753.
- 8. Bell SP, Schnelle J, Nwosu SK, **Schildcrout J**, Goggins K, Cawthon C, et al. Development of a multivariable model to predict vulnerability in older American patients hospitalised with cardiovascular disease. BMJ Open. 2015;5(8):e008122.
- 9. Peterson JF, Field JR, Shi Y, **Schildcrout JS**, Denny JC, McGregor TL, et al. Attitudes of clinicians following large-scale pharmacogenomics implementation. Pharmacogenomics J. 2015 Aug;.
- 10. Ierodiakonou D, Zanobetti A, Coull BA, Melly S, Postma DS, Boezen HM, et al. Ambient air pollution, lung function, and airway responsiveness in asthmatic children. J Allergy Clin Immunol. 2015 Jun;.

- 11. Weinger MB, Slagle JM, Kuntz AH, **Schildcrout JS**, Banerjee A, Mercaldo ND, et al. A Multimodal Intervention Improves Postanesthesia Care Unit Handovers. Anesth Analg. 2015 Oct;121(4):957–971.
- 12. **Schildcrout JS**, Han X, Ehrenfeld JM, Wagner CE, Pretorius M. In reply. Anesthesiology. 2014 Nov;121(5):1128–1130.
- 13. Wanderer JP, Shi Y, **Schildcrout**, **JS**, Ehrenfeld JM, Epstein RH. Supervising anesthesiologists cannot be effectively compared according to their patients' postanesthesia care unit admission pain scores. Anesth Analg. 2015 Apr;120(4):923–932.
- 14. Gupta C, Bell SP, **Schildcrout JS**, Fletcher S, Goggins KM, Kripalani S, et al. Predictors of health care system and physician distrust in hospitalized cardiac patients. J Health Commun. 2014;19(suppl 2):44–60.
- 15. Goggins KM, Wallston KA, Nwosu S, **Schildcrout**, **JS**, Castel L, Kripalani S. Health literacy, numeracy, and other characteristics associated with hospitalized patients' preferences for involvement in decision making. J Health Commun. 2014;19(suppl 2):29–43.
- 16. Mixon AS, Myers AP, Leak CL, Lou Jacobsen JM, Cawthon C, Goggins KM, et al. Characteristics associated with postdischarge medication errors. Mayo Clin Proc. 2014 Aug;89(8):1042–1051.
- 17. Chen Y, Lorenzi N, Nyemba S, **Schildcrout JS**, Malin B. We work with them? Healthcare workers interpretation of organizational relations mined from electronic health records. Int J Med Inform. 2014 Jul;83(7):495–506.
- 18. Bowton E, Field JR, Wang S, **Schildcrout JS**, Van Driest SL, Delaney JT, et al. Biobanks and electronic medical records: enabling cost-effective research. Sci Transl Med. 2014 Apr;6(234):234cm3.
- 19. Meyers AG, Salanitro A, Wallston KA, Cawthon C, Vasilevskis EE, Goggins KM, et al. Determinants of health after hospital discharge: rationale and design of the Vanderbilt Inpatient Cohort Study (VICS). BMC Health Serv Res. 2014;14:10.
- 20. Wagner CE, Bick JS, Johnson D, Ahmad R, Han X, Ehrenfeld JM, et al. Etomidate use and postoperative outcomes among cardiac surgery patients. Anesthesiology. 2014 Mar;120(3):579–589.
- 21. Van Driest S, Shi Y, Bowton E, **Schildcrout J**, Peterson J, Pulley J, et al. Clinically actionable genotypes among 10,000 patients with preemptive pharmacogenomic testing. Clin Pharmacol Ther. 2014 Apr;95(4):423–431.
- 22. Delaney JT, Muhammad R, Shi Y, **Schildcrout JS**, Blair M, Short L, et al. Common SCN10A variants modulate PR interval and heart rate response during atrial fibrillation. Europace. 2014 Apr;16(4):485–490.
- 23. Willens DE, Kripalani S, **Schildcrout JS**, Cawthon C, Wallston K, Mion LC, et al. Association of Brief Health Literacy Screening and Blood Pressure in Primary Care. J Health Commun. 2013 Dec;18(sup1):129–142.
- 24. Bick JS, Demaria S, Kennedy JD, Schwartz AD, Weiner MM, Levine AI, et al. Comparison of Expert and Novice Performance of a Simulated Transesophageal Echocardiography Examination. Simul Healthc. 2013 Oct:8(5):329–334.
- 25. Peterson JF, Bowton E, Field JR, Beller M, Mitchell J, **Schildcrout J**, et al. Electronic health record design and implementation for pharmacogenomics: a local perspective. Genet Med. 2013 Oct;15(10):833–841.
- 26. Gupta RK, Lane J, Allen B, Shi Y, **Schildcrout JS**. Improving needle visualization by novice residents during an in-plane ultrasound nerve block simulation using an in-plane multiangle needle guide. Pain Med. 2013 Oct;14(10):1600–1607.
- 27. Rasmussen SB, Saied NN, Bowens C, Mercaldo ND, **Schildcrout JS**, Malchow RJ. Duration of upper and lower extremity peripheral nerve blockade is prolonged with dexamethasone when added to ropivacaine: a retrospective database analysis. Pain Med. 2013 Aug;14(8):1239–1247.

- 28. Shuldiner AR, Relling MV, Peterson JF, Hicks JK, Freimuth RR, Sadee W, et al. The Pharmacogenomics Research Network Translational Pharmacogenetics Program: overcoming challenges of real-world implementation. Clin Pharmacol Ther. 2013 Aug;94(2):207–210.
- 29. Ritchie MD, Denny JC, Zuvich RL, Crawford DC, **Schildcrout JS**, Bastarache L, et al. Genome-and phenome-wide analyses of cardiac conduction identifies markers of arrhythmia risk. Circulation. 2013 Apr;127(13):1377–1385.
- 30. **Schildcrout JS**, Garbett SP, Heagerty PJ. Outcome vector dependent sampling with longitudinal continuous response data: stratified sampling based on summary statistics. Biometrics. 2013 Jun;69(2):405–416.
- 31. Kynes JM, **Schildcrout JS**, Hickson GB, Pichert JW, Han X, Ehrenfeld JM, et al. An analysis of risk factors for patient complaints about ambulatory anesthesiology care. Anesth Analg. 2013 Jun;116(6):1325–1332.
- 32. Denny JC, **Schildcrout JS**, Pulley JM, Roden DM. Response to "Doubt about the feasibility of preemptive genotyping". Clin Pharmacol Ther. 2013 Mar;93(3):234.
- 33. Liu M, McPeek Hinz ER, Matheny ME, Denny JC, **Schildcrout JS**, Miller RA, et al. Comparative analysis of pharmacovigilance methods in the detection of adverse drug reactions using electronic medical records. J Am Med Inform Assoc. 2013 May;20(3):420–426.
- 34. **Schildcrout JS\***, Denny JC\*, Bowton E, Gregg W, Pulley JM, Basford MA, et al. Optimizing drug outcomes through pharmacogenetics: a case for preemptive genotyping. Clin Pharmacol Ther. 2012 Aug;92(2):235–242.
- 35. Billings FT, Pretorius M, **Schildcrout**, **JS**, Mercaldo ND, Byrne JG, Ikizler TA, et al. Obesity and Oxidative Stress Predict AKI after Cardiac Surgery. J Am Soc Nephrol. 2012 Jul;23(7):1221–1228.
- 36. Pulley JM, Denny JC, Peterson JF, Bernard GR, Vnencak-Jones CL, Ramirez AH, et al. Operational Implementation of Prospective Genotyping for Personalized Medicine: The Design of the Vanderbilt PREDICT Project. Clin Pharmacol Ther. 2012 Jul;92(1):87–95.
- 37. Lenart MJ, Wong K, Gupta RK, Mercaldo ND, **Schildcrout**, **JS**, Michaels D, et al. The impact of peripheral nerve techniques on hospital stay following major orthopedic surgery. Pain Med. 2012 Jun;13(6):828–834.
- 38. Siew ED, Ikizler TA, Matheny ME, Shi Y, **Schildcrout**, **JS**, Danciu I, et al. Estimating baseline kidney function in hospitalized patients with impaired kidney function. Clin J Am Soc Nephrol. 2012 May;7(5):712–719.
- 39. Ramirez AH, Shi Y, **Schildcrout**, **JS**, Delaney JT, Xu H, Oetjens MT, et al. Predicting warfarin dosage in European-Americans and African-Americans using DNA samples linked to an electronic health record. Pharmacogenomics. 2012 Mar;13:407–418.
- 40. Delaney JT, Ramirez AH, Bowton E, Pulley JM, Basford MA, **Schildcrout JS**, et al. Predicting clopidogrel response using DNA samples linked to an electronic health record. Clin Pharmacol Ther. 2012 Feb;91:257–263.
- 41. Haneuse S, **Schildcrout J**, Gillen D. A two-stage strategy to accommodate general patterns of confounding in the design of observational studies. Biostatistics. 2012 Apr;13(2):274–288.
- 42. **Schildcrout JS**, Mumford SL, Chen Z, Heagerty PJ, Rathouz PJ. Outcome-dependent sampling for longitudinal binary response data based on a time-varying auxiliary variable. Stat Med. 2012 Sep;31(22):2441–2456.
- 43. **Schildcrout JS**, Haneuse S, Peterson JF, Denny JC, Matheny ME, Waitman LR, et al. Analyses of longitudinal, hospital clinical laboratory data with application to blood glucose concentrations. Stat Med. 2011 Nov;30:3208–3220.

- 44. Reynolds PQ, Sanders NW, **Schildcrout JS**, Mercaldo ND, St Jacques PJ. Expansion of the surgical Appar score across all surgical subspecialties as a means to predict postoperative mortality. Anesthesiology. 2011 Jun;114:1305–1312.
- 45. **Schildcrout JS**, Heagerty PJ. Outcome-dependent sampling from existing cohorts with longitudinal binary response data: study planning and analysis. Biometrics. 2011 Dec;67:1583–1593.
- 46. Hyman SA, Michaels DR, Berry JM, **Schildcrout JS**, Mercaldo ND, Weinger MB. Risk of burnout in perioperative clinicians: a survey study and literature review. Anesthesiology. 2011 Jan;114:194–204.
- 47. Ramirez AH, **Schildcrout JS**, Blakemore DL, Masys DR, Pulley JM, Basford MA, et al. Modulators of normal electrocardiographic intervals identified in a large electronic medical record. Heart Rhythm. 2011 Feb;8:271–277.
- 48. Peterson JF, Shi Y, Denny JC, Matheny ME, **Schildcrout JS**, Waitman LR, et al. Prevalence and Clinical Significance of Discrepancies within Three Computerized Pre-Admission Medication Lists. AMIA Annu Symp Proc. 2010;2010:642–646.
- 49. Denny JC, Ritchie MD, Crawford DC, **Schildcrout JS**, Ramirez AH, Pulley JM, et al. Identification of genomic predictors of atrioventricular conduction: using electronic medical records as a tool for genome science. Circulation. 2010 Nov;122:2016–2021.
- 50. McCoy AB, Waitman LR, Gadd CS, Danciu I, Smith JP, Lewis JB, et al. A computerized provider order entry intervention for medication safety during acute kidney injury: a quality improvement report. Am J Kidney Dis. 2010 Nov;56:832–841.
- 51. **Schildcrout JS**, Basford MA, Pulley JM, Masys DR, Roden DM, Wang D, et al. An analytical approach to characterize morbidity profile dissimilarity between distinct cohorts using electronic medical records. J Biomed Inform. 2010 Dec;43(6):914–923.
- 52. Pulley J, Hassan NN, Bernard GR, Jirjis JN, **Schildcrout J**, Robertson D, et al. Identifying unpredicted drug benefit through query of patient experiential knowledge: a proof of concept web-based system. Clin Transl Sci. 2010 Jun;3:98–103.
- 53. Hughes CG, Weavind L, Banerjee A, Mercaldo ND, **Schildcrout JS**, Pandharipande PP. Intraoperative risk factors for acute respiratory distress syndrome in critically ill patients. Anesth Analg. 2010 Aug;111:464–467.
- 54. Bowens C, Gupta RK, O'Byrne WT, **Schildcrout JS**, Shi Y, Hawkins JJ, et al. Selective local anesthetic placement using ultrasound guidance and neurostimulation for infraclavicular brachial plexus block. Anesth Analg. 2010 May;110:1480–1485.
- 55. Matheny ME, Miller RA, Ikizler TA, Waitman LR, Denny JC, **Schildcrout JS**, et al. Development of inpatient risk stratification models of acute kidney injury for use in electronic health records. Med Decis Making. 2010;30:639–650.
- 56. Miller A, Pilcher D, Mercaldo N, Leong T, Scheinkestel C, **Schildcrout J**. What can paper-based clinical information systems tell us about the design of computerized clinical information systems (CIS) in the ICU? Aust Crit Care. 2010 Aug;23:130–140.
- 57. **Schildcrout JS**, Rathouz PJ. Longitudinal studies of binary response data following case-control and stratified case-control sampling: design and analysis. Biometrics. 2010 Jun;66:365–373.
- 58. Fieberg J, Rieger RH, Zicus MC, **Schildcrout JS**. Regression modelling of correlated data in ecology: subject-specific and population averaged response patterns. Journal of Applied Ecology. 2009;46(5):1018–1025.
- 59. Aliferis CF, Statnikov A, Tsamardinos I, **Schildcrout JS**, Shepherd BE, Harrell FE. Factors influencing the statistical power of complex data analysis protocols for molecular signature development from microarray data. PLoS ONE. 2009;4:e4922.

- 60. Haneuse S, **Schildcrout J**, Crane P, Sonnen J, Breitner J, Larson E. Adjustment for selection bias in observational studies with application to the analysis of autopsy data. Neuroepidemiology. 2009;32:229–239.
- 61. **Schildcrout JS**, Heagerty PJ. On outcome-dependent sampling designs for longitudinal binary response data with time-varying covariates. Biostatistics. 2008 Oct;9:735–749.
- 62. **Schildcrout JS**, Jenkins CA, Ostroff JH, Gillen DL, Harrell FE, Trost DC. Analysis of longitudinal laboratory data in the presence of common selection mechanisms: a view toward greater emphasis on pre-marketing pharmaceutical safety. Stat Med. 2008 May;27:2248–2266.
- 63. FitzHenry F, Peterson JF, Arrieta M, Waitman LR, **Schildcrout JS**, Miller RA. Medication administration discrepancies persist despite electronic ordering. J Am Med Inform Assoc. 2007;14:756–764.
- 64. **Schildcrout JS**, Heagerty PJ. Marginalized models for moderate to long series of longitudinal binary response data. Biometrics. 2007 Jun;63:322–331.
- 65. **Schildcrout JS**, Sheppard L, Lumley T, Slaughter JC, Koenig JQ, Shapiro GG. Ambient air pollution and asthma exacerbations in children: an eight-city analysis. Am J Epidemiol. 2006 Sep;164:505–517.
- 66. Denny JC, Spickard A, Miller RA, **Schildcrout J**, Darbar D, Rosenbloom ST, et al. Identifying UMLS concepts from ECG Impressions using KnowledgeMap. AMIA Annu Symp Proc. 2005;p. 196–200.
- 67. Trenga CA, Sullivan JH, **Schildcrout JS**, Shepherd KP, Shapiro GG, Liu LJ, et al. Effect of particulate air pollution on lung function in adult and pediatric subjects in a Seattle panel study. Chest. 2006 Jun;129:1614–1622.
- 68. **Schildcrout JS**, Heagerty PJ. Regression analysis of longitudinal binary data with time-dependent environmental covariates: bias and efficiency. Biostatistics. 2005 Oct;6:633–652.
- 69. Sheppard L, Slaughter JC, **Schildcrout J**, Liu LJ, Lumley T. Exposure and measurement contributions to estimates of acute air pollution effects. J Expo Anal Environ Epidemiol. 2005 Jul;15:366–376.
- 70. Kanter JW, **Schildcrout JS**, Kohlenberg RJ. In vivo processes in cognitive therapy for depression: Frequency and benefits. Psychotherapy Research. 2005;15(4):366–373.
- 71. Goss CH, Newsom SA, **Schildcrout JS**, Sheppard L, Kaufman JD. Effect of ambient air pollution on pulmonary exacerbations and lung function in cystic fibrosis. Am J Respir Crit Care Med. 2004 Apr;169:816–821.
- 72. Miller JM, Smalling R, Ohman EM, Bode C, Betriu A, Kleiman NS, et al. Effectiveness of early coronary angioplasty and abciximab for failed thrombolysis (reteplase or alteplase) during acute myocardial infarction (results from the GUSTO-III trial). Global Use of Strategies To Open occluded coronary arteries. Am J Cardiol. 1999 Oct;84:779–784.
- 73. **Schildcrout JS**, Margolin BH, Zeiger E. Predicting rodent carcinogenicity using potency measures of the in vitro sister chromatid exchange and chromosome aberration assays. Environ Mol Mutagen. 1999;33:59–64.
- 74. Fetterman BA, Kim BS, Margolin BH, **Schildcrout JS**, Smith MG, Wagner SM, et al. Predicting rodent carcinogenicity from mutagenic potency measured in the Ames Salmonella assay. Environ Mol Mutagen. 1997;29:312–322.
- \* denotes equal contribution.

#### Presentations

Invited Presentations

- 1. Auxiliary variable sampling designs for longitudinal binary data with application to spirometry-based COPD diagnosis, University of Tennessee Health Sciences, April 2016.
- 2. Targeted sampling designs to improve research efficiency with application to a longitudinal lung function study in children with asthma, Department of Public Health Science, University of California, Davis, October 2015.

- 3. Auxiliary variable sampling designs for longitudinal binary data with application to spirometry-based COPD diagnosis, University of Louisville, September 2015.
- 4. An Evaluation of Approaches to Integrate Pre-emptive Genomic Testing into Medication Prescribing Decisions, International Health Economics Association Meeting, Milan, IT, July 2015
- 5. Design and analysis of efficient epidemiological substudies from large longitudinal cohorts, Society for Epidemiological Research Conference, Denver, CO, June 2015.
- 6. Design and Analysis of retrospective studies for longitudinal data, East North American Region of the International Biometric Society, Miami, FL, March 2015.
- 7. Development and validation of a predictive model for preemptive pharmacogenetic testing, Society for Medical Decision Making, North American Meeting, Miami, FL, October 2014
- 8. Development and validation of a predictive model for preemptive pharmacogenetic testing, Seattle Symposium on Health Care Data Analytics, Seattle, WA, September 2014
- 9. Analytical approaches for targeted subsampling designs with longitudinal continuous response data, Southern Regional Council on Statistics Summer Research Conference, Galveston, Texas, June 2014
- 10. Analytical approaches for targeted subsampling designs with longitudinal continuous response data, Department of Biostatistics, University of Florida, Gainesville, FL, May 2014
- 11. Development and implementation of a predictive model for preemptive pharmacogenetic testing, Department of Biostatistics and Medical Informatics, University of Wisconsin, Madison, WI, November 2013.
- 12. Efficient Subsampling from Existing Cohort Studies with Longitudinal Continuous Response Data. Department of Biostatistics and Epidemiology, University of Pennsylvania, Philadelphia, PA April 2013.
- 13. Outcome vector dependent sampling with longitudinal continuous response data: stratified sampling based on summary statistics. Harvard School of Public Health, Environmental Statistics Working Group, Boston MA April 2012.
- 14. Outcome Dependent Sampling for Longitudinal Binary Response Data Based on a Time-Varying Auxiliary Variable, East North American Region of the International Biometric Society, Washington DC, April 2012.
- 15. Outcome vector dependent sampling with longitudinal continuous response data: stratified sampling based on summary statistics. University of Colorado, Denver, Denver CO, February 2012.
- 16. Response biased sampling with longitudinal continuous response data: study planning and analysis, University of Maryland Baltimore County, Baltimore, MD, November 2011.
- 17. Semiparametric Estimation for Longitudinal Binary Response Model Parameters Under Outcome-Dependent Sampling Designs, Joint Statistical Meetings, Miami Beach, FL, August 2011.
- 18. Semiparametric Estimation for Longitudinal Binary Response Model Parameters Under Outcome-Dependent Sampling Designs, International Mathematics Society-China Conference on Probability and Statistics, Xi'An, China, July 2011.
- 19. Analyses of longitudinal, hospital clinical laboratory data with application to blood glucose concentrations, Causal Inference in Health Research Workshop, Montreal, Canada, May 2011.
- 20. Longitudinal studies of binary response data following case-control and stratified case-control sampling, Division of Epidemiology, Statistics and Prevention Research, National Institutes of Child Health and Human Development, Bethesda, MD, September 2010.

- 21. Longitudinal studies of binary response data following case-control and stratified case-control sampling, University of Southern California, Los Angeles, CA, April 2010.
- Longitudinal studies of binary response data following case-control and stratified case-control sampling, University of California, Irvine, CA, April 2010.
- 23. On Planning an Outcome Dependent Sampling Study with Longitudinal Binary Response Data, East North American Region of the International Biometric Society, San Antonio, TX, March 2009.
- 24. Statistical considerations in the practice of law, The Henry Phillips Chapter of the American Inns of Court Meeting, Nashville, TN, January 2008.
- 25. Analysis of Longitudinal Clinical Lab Data with Latent Mixture Models, Biopharmaceutical Applied Statistics Symposium, Savannah, GA, November 2007.
- 26. Analysis of Longitudinal Clinical Lab Data with Latent Mixture Models, The International Conference on Industrial and Applied Mathematics, Zurich, Switzerland, July 2007.
- 27. Marginalized Model Estimation under a Biased Sampling Study Design, presented at the East North American Region of the International Biometric Society, Atlanta, GA, March 2007.
- 28. Flexible Regression Modeling of Longitudinal Clinical Lab Data, presented at Pfizer Inc., Groton, CT, July 2006.
- 29. Dynamic Regression Models towards Early Detection of Drug Toxicity, Presented at the Midwest Biopharmaceutical Statistics Workshop, Muncie, IN, May 2006.
- 30. Regression Analysis of Longitudinal Binary Outcomes with Environmental Covariates: Bias and Efficiency, Presented at the Middle Tennessee Chapter of the American Statistical Association, October 2004.

#### Contributed Presentations

- 1. Outcome vector dependent sampling with longitudinal continuous response data. Joint Statistical Meetings, Boston MA, August 2014 (Topic contributed).
- 2. Outcome vector dependent sampling with longitudinal continuous response data: stratified sampling based on summary statistics. Joint Statistical Meetings, San Diego CA, August 2012 (Topic contributed).
- 3. Time and outcome dependent sampling studies for longitudinal binary response data, International Biometrics Conference, Florianopolis, Brazil, December 2010.
- 4. Time and outcome dependent sampling studies for longitudinal binary response data, Joint Statistical Meetings, Vancouver, British Columbia, August 2010.
- 5. Analysis and Summarization of Longitudinal Clinical Lab Data Towards Detection of Hepatotoxicity, Joint Statistical Meetings, Denver, Colorado, August 2008 (Topic contributed).
- 6. Efficient Outcome Dependent Sampling Designs for Longitudinal Binary Response Data, International Biometrics Conference, Dublin, Ireland, July 2008.
- 7. An Efficient Outcome-Dependent Sampling for Longitudinal Binary Response Data, presented at the Joint Statistical Meetings, Seattle, WA, August 2006 (Topic contributed).
- 8. Marginalized Regression Models for Long Series of Binary Response Data, Presented at the East North American Region of the International Biometrics Society, Austin, TX, March 2005.
- Outcome Dependent Sampling with Longitudinal Binary Response Data, presented at the West North American Region of the International Biometrics Society, June 2004.

- 10. Marginalized regression models for categorical data with both serial and long-range dependence. Presented at the Joint Statistical Meetings, August 2003.
- 11. Spatial and temporal variation in fine particulate concentrations in Seattle. Poster at the annual meeting of the International Society for Environmental Epidemiology, August 2002.
- 12. Serial and long range correlation in a panel study with binary response data: detection and impact on regression analysis. Presented at the East North American Region of the International Biometrics Society Meeting, March 2002.

May 4, 2016