

Abigail B. Shoben
Associate Professor, Biostatistics
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Education and Work History

- 1998-2002 Brown University, Honors in Chemistry, Sc.B. 2002.
- 2002-2003 The Ohio State University, Math, Science, and Technology Education, M.Ed. 2003.
- 2003-2006 Montgomery County Public Schools, Chemistry Teacher, Richard Montgomery High School. Rockville, MD (tenured 2005).
- 2006-2010 University of Washington, Biostatistics, M.S. 2008; Ph.D. 2010.
- 2010-2016 The Ohio State University, Assistant Professor, Division of Biostatistics, College of Public Health.
- 2016-present The Ohio State University, Associate Professor, Division of Biostatistics, College of Public Health.

Honors and Awards

- NIH Trainee, Cardiovascular Biostatistics Training Grant, University of Washington, 2007-2010.
- Donovan J. Thompson Award for excellence in theoretical and applied biostatistics, University of Washington, 2008.
- Outstanding Student Award, Division of Biostatistics, University of Washington, 2010.
- Teaching Award, College of Public Health, The Ohio State University, 2013.

Publications

*(peer reviewed except as noted; primary mentorship role for student first author denoted with *)*

1. **Shoben AB**, Rudser KD, de Boer IH, Young B, Kestenbaum B. (2008). "Association of Oral Calcitriol with Improved Survival in Nondialyzed CKD." *Journal of the American Society of Nephrology*. 19(8): 1613-9.

2. de Boer IH, Kestenbaum B, **Shoben AB**, Michos ED, Sarnak MJ, Siscovick DS. (2009). "25-hydroxyvitamin D levels inversely associate with risk for developing coronary artery calcification." *Journal of the American Society of Nephrology*. 20(8): 1805-12.
3. **Shoben AB**, Kestenbaum B, Levin G, Hoofnagle AN, Psaty BM, Siscovick DS, de Boer IH. (2011). "Seasonal Variation in 25-Hydroxyvitamin D in the Cardiovascular Health Study." *American Journal of Epidemiology*. 174(12): 1363-1372.
4. **Shoben AB**, Levin G, de Boer IH, Yeung C, Watnick S, Ayers E, Kestenbaum B. (2012). "Variation in Oral Calcitriol Response In Patients With Stage 3-4 CKD." *American Journal of Kidney Disease*. 59(5): 645-652.
5. Sachs MC, **Shoben A**, Levin GP, Robinson-Cohen C, Hoofnagle AN, Swords-Jenny N, Ix JH, Budoff M, Lutsey PL, Siscovick DS, Kestenbaum B, de Boer IH. (2013). "Estimating mean annual 25-hydroxyvitamin D concentrations from single measurements: the Multi-Ethnic Study of Atherosclerosis." *American Journal of Clinical Nutrition*. 97(6):1243-51.
6. Rothstein MA, **Shoben AB**. (2013). "Does Consent Bias Research?" *American Journal of Bioethics*. 13(4): 27-37.
7. Rothstein MA, **Shoben AB**. (2013). "An Unbiased Response to the Open Peer Commentaries on 'Does Consent Bias Research?'" *American Journal of Bioethics*. 13(4):W1-4. (editor reviewed)
8. **Shoben AB**. (2013). "The Value of Sound Research Practices Even Facing Pandemics." *American Journal of Bioethics*. 13(9):15-7. (editor reviewed)
9. **Shoben AB**, Emerson, SS. (2014) "Violations of the independent increment assumption when using GEE in longitudinal group sequential trials." *Statistics in Medicine*. 2014; 33(29): 5041-56.
10. Andridge RR, **Shoben AB**, Muller KE, Murray DM. (2014) "Analytic Methods for Individually Randomized Group Treatment Trials and Group-Randomized Trials When Subjects Belong to Multiple Groups." *Statistics in Medicine*. 33(13): 2178-90.
11. **Shoben AB**, Katz ML. (2014). "Capsule Commentary on Price-Haywood et al., 'Comparative Effectiveness of Audit-Feedback Versus Additional Physician Communication Training to Improve Cancer Screening for Patients with Limited Health Literacy.'" *Journal of General Internal Medicine*. 29(8): 1162. (editor reviewed)
12. Bansal N, Zelnick L, Robinson-Cohen C, Hoofnagle AN, Ix JI, Lima JA, **Shoben AB**, Peralta C, Siscovick, DS, Kestenbaum B, de Boer IH. (2014) "Serum parathyroid hormone and 25-hydroxyvitamin D concentrations and risk of incident heart failure: the Multi-Ethnic Study of Atherosclerosis" *Journal of the American Heart Association*. 3(6): e001278.

13. Foraker RE, **Shoben AB**, Lopetegui MA, Lai AM, Payne PR, Kelley M, Roth C, Tindle H, Schreiner A, Jackson RD. (2014). "Assessment of Life's Simple 7™ in the Primary Care Setting: the Stroke Prevention in Healthcare Delivery EnviRonmEnts (SPHERE) study." *Contemporary Clinical Trials*. 38(2): 182-9.
14. Hayes RB, Geller AC, Churchill L, Jolicoeur D, Murray DM, **Shoben AB**, David SP, Adams M, Okuyemi K, Fauver R, Gross R, Leone F, Xiao R, Waugh J, Crawford S, Ockene JK. (2014). "Teaching tobacco dependence treatment and counseling skills during medical school: rationale and design of the Medical Students helping patients Quit tobacco (MSQuit) group randomised controlled trial." *Contemporary Clinical Trials*. 37(2): 284-93.
15. Dembe AE, Yao X, Wickizer TM, **Shoben AB**, Dong XS. (2014). "Using O*NET to estimate the association between work exposures and chronic diseases." *American Journal Industrial Medicine*. 57(9): 1022-31.
16. Dembe AE, Yao X, Wickizer T, **Shoben A**, Dong XS. (2014). "A Novel Method for Estimating the Effects of Job, Conditions on Asthma and Chronic Lung Disease." *Journal of Asthma*. 51(8): 799-807.
17. Foraker RE, Kite B, Kelley M, Lai AM, Roth C, Lopetegui MA, **Shoben AB**, Langan M, Rutledge N, Payne PR. (2015) "EHR-based Visualization Tool: Adoption Rates, Satisfaction, and Patient Outcomes" *eGEMs (Generating Evidence & Methods to improve patient outcomes)*. 3(2): Article 5.
18. Steinman KJ, **Shoben AB**, Dembe AE, Kelleher KJ. (2015). "How Long Do Adolescents Wait for Psychiatry Appointments?" *Community Mental Health Journal*. 51(7): 782-9.
19. Ballash GA, Dubey JP, Jenkins MC, Kwok OCH, **Shoben AB**, Robinson TL, Kraft T, Dennis PM. (2015). "Seroprevalence of Toxoplasma gondii in White-tailed deer (*Odocoileus virginianus*) and free-roaming cats (*Felis catus*) across a Suburban to Urban Gradient in Northeastern Ohio." *Ecohealth*. 12(2): 359-67
20. Klein EG, **Shoben AB**, Krygowski S, Ferketich A, Berman M, Peters E, Unnava R, Wewers ME. (2015). "Does Size Impact Attention and Recall of Graphic Health Warnings?" *Tobacco Regulatory Science*. 1(2): 175-185.
21. Olesiuk WJ, Sweeney HA, Seiber EE, Zhu H, Schweikhart SB, **Shoben AB**, Tan KK. (2016). "A Comparison of Benefit Limits in Mental Health." *Administration and Policy in Mental Health*. 43(4): 524-34.
22. Ockene JK, Adams M, Churchill LC, Crawford SL, David SP, Gross R, Hayes RB, Huggett KN, **Shoben AB**, Jolicoeur D, Murray DM, Okuliar C, Geller AC. (2016). "Teaching Medical Students to Help Patients Quit Smoking: Outcomes of a 10 School Trial: A Randomized, Controlled Trial." *Journal of General Internal Medicine*. 31(2): 172-81

23. Roth C, Payne P, Weier R, **Shoben A**, Fletcher E, Lai A, Kelley M, Plascak J, Foraker R. (2016). "The Geographic Distribution of Cardiovascular Health in the Stroke Prevention in Healthcare Delivery Environments (SPHERE) Study." *J Biomed Inform.* 60: 95-103
24. Foraker RE, **Shoben AB**, Kelley M, Lai AM, Lopetegui MA, Jackson RD, Langan MA, Payne PR. (2016). "Electronic Health Record-Based Assessment of Cardiovascular Health: The Stroke Prevention in Healthcare Delivery Environments (SPHERE) Study." *Prev Med Rep.* 4: 303-8.
25. Muhlestein D, Wickizer T, **Shoben A**. (2016). "The Spillover Effect of a Change in Medicare Reimbursements on Provider Behavior in the Non-Medicare Population for Bariatric Surgery." *World Medical & Health Policy.* 8(1): 74-94.
26. Hodges NL, **Shoben AB**, Paskett ED, Katz ML. (2016). "The impact of a literacy-sensitive intervention on CRC screening knowledge, attitudes, and intention." *Journal of Community and Supportive Oncology.* 14(10): 420-26
27. Foraker RE, Greiner M, Sims M, Tucker KL, Towfighi A, Bidulescu A, **Shoben AB**, Smith S, Talegawkar S, Blackshear C, Wang W, Hardy NC, O'Brien E. (2016). "Comparison of risk scores for the prediction of stroke in African Americans: Findings from the Jackson Heart Study." *Am Heart J.* 177: 25-32.
28. Kerrigan K, **Shoben A**, Otterson G. (2016). "Treatment of Lung Cancer Patients With Actionable Mutations in the Intensive Care Unit." *Clin Lung Cancer.* 17(6): 523-527
29. Davison G, **Shoben A**, Pasch KE, Klein EG. (2016). "Energy Drink Use Among Ohio Appalachian Smokers." *J Community Health.* 41(5): 897-902.
30. Barnett KS, **Shoben AB**, McRee A, Reiter PL, Paskett ED, Katz ML. (2016). "Human papillomavirus vaccine and Pap tests on college campuses: How do historically black colleges and universities (HBCUs) measure up?" *J Am Coll Health.* 64 (8): 613-618.
31. Bentley MA, **Shoben A**, Levine R. (2016). "The Demographics and Education of Emergency Medical Services (EMS) Professionals: A National Longitudinal Investigation." *Prehosp Disaster Med.* S1: S18-S29
32. Muhlestein DB, **Shoben A**, Wickizer T. (2016). "Caps on noneconomic damages' effect on the number of paid malpractice claims in various American states." *Int J Healthcare.* 2(2): 45-56.
33. Curry E, Nemeth JM, Wermert A, Conroy S, **Shoben A**, Ferketich AK, Wewers ME. (2017). "A Descriptive Report of Electronic Cigarette Use After Participation in a Community-Based Tobacco Cessation Trial." *Nicotine Tob Res.* 20(1): 135-139.
34. Nemeth JM, Cooper S, Wermert A, **Shoben A**, Wewers ME. (2017). "The relationship between type of telephone service and smoking cessation among rural smokers enrolled in quitline tobacco dependence treatment." *Prev Med Rep.* 8: 226-231.

35. Wewers ME, **Shoben A**, Conroy S, Curry E, Ferketich AK, Murray DM, Nemeth J, Wermert A. (2017). "Effectiveness of Two Community Health Worker Models of Tobacco Dependence Treatment Among Community Residents of Ohio Appalachia." *Nicotine Tob Res.* 19(12): 1499-1507.
36. Evans AT, Peters E, **Shoben A**, Meilleur L, Klein EG, Tompkins MK, Romer D, Tusler M. (2017). "Cigarette Graphic Warning Labels Are Not Created Equal: They Can Increase or Decrease Smokers' Quit Intentions Relative to Text-only Warnings." *Nicotine Tob Res.* 19(10): 1155-1162.
37. Klein EG, Quisenberry AJ **Shoben AB**, Cooper S, Ferketich AK, Berman M, Peters E, Wewers ME. (2017). "Health Warning Labels for Smokeless Tobacco: The Impact of Graphic Images on Attention, Recall, and Craving." *Nicotine Tob Res.* 19(1): 1172-1177.
38. Weber A, Sinnott L, **Shoben A**, Harrison T, Steward D. (2017). "Plasma and Urinary Oxytocin Trajectories in Extremely Premature Infants during NICU Hospitalization." *Biological Research for Nursing.* 19(5): 549-558.
39. Weber A, Harrison TM, Steward D, Sinnott L, **Shoben A**. (2017). "Oxytocin trajectories and social engagement in extremely premature infants during NICU hospitalization." *Infant Behav Dev.* 48: 78-87.
40. Reiter PL, Katz ML, Bauermeister JA, **Shoben AB**, Paskett ED, McRee AL. (2017). "Recruiting Young Gay and Bisexual Men for a Human Papillomavirus Vaccination Intervention Through Social Media: The Effects of Advertisement Content." *JMIR Public Health Surveill.* 3(2): e33.
41. Bower JK, Meadows RJ, Foster MC, Foraker RE, **Shoben AB**. (2017). "The Association of Percent Body Fat and Lean Mass With HbA1c in US Adults." *J Endocr Soc.* 1(6): 600-608.
42. Bower JK, Bollinger CE, Foraker RE, Hood DB, **Shoben AB**, Lai AM. (2017). "Active Use of Electronic Health Records (EHRs) and Personal Health Records (PHRs) for Epidemiologic Research: Sample Representativeness and Nonresponse Bias in a Study of Women During Pregnancy." *eGEMS*1(1): 1263.
43. **Shoben AB**, Rudser KD, Emerson SS. (2017). "More data, less information? Potential for nonmonotonic information growth using GEE." *J Biopharm Stat.* 27(1): 135-147.
44. Merritt DJ, Colker R, Deason EE, Smith M, **Shoben A**. (2017). "Formative Assessments: A Law School Case Study." *University of Detroit Mercy Law Review.* 94-3: 387. (editor reviewed)
45. Zigmont VA **Shoben AB**, Kaye GL, Snow RJ, Clinton SK, Harris RE, Olivo-Marston SE. (2018). "An Evaluation of Reach for a Work Site Implementation of the National Diabetes Prevention Program Focusing on Diet and Exercise." *Am J Health Promot.* 32(6): 1417-1424.

46. Reiter PL, Katz ML, Bauermeister JA, **Shoben AB**, Paskett ED, McRee AL. (2018). "Increasing Human Papillomavirus Vaccination Among Young Gay and Bisexual Men: A Randomized Pilot Trial of the Outsmart HPV Intervention." *LGBT Health*. 5(5): 325-329.
47. Smith LH, Petosa RL, **Shoben AB**. (2018). Peer mentor versus teacher delivery of a physical activity program on the effects of BMI and daily activity: protocol of a school-based group randomized controlled trial in Appalachia. *BMC Public Health*. 18(1): 633.
48. Weisband YL, Gallo MF, Klebanoff M, **Shoben A**, Norris AH. (2018). "Progression of care among women who use a midwife for prenatal care: Who remains in midwife care?." *Birth*. 45(1): 28-36.
49. Weber A, Harrison TM, Sinnott L, **Shoben A**, Steward D. (2018). "Associations Between Nurse-Guided Variables and Plasma Oxytocin Trajectories in Premature Infants During Initial Hospitalization." *Adv Neonatal Care*. 18(1): E12-E23.
50. Evans AT, Peters E, **Shoben AB**, Meilleur L, Klein EG, Tompkins MK, Romer D, Tusler M. (2018). "Cigarette graphic warning labels increase both risk perceptions and smoking myth endorsement." *Psychol Health*. 33(2): 213-234.
51. Weisband YL, Gallo MF, Klebanoff M, Shoben A, Norris AH. (2018). "Who Uses a Midwife for Prenatal Care and for Birth in the United States? A Secondary Analysis of Listening to Mothers III." *Womens Health Issues*. 28(1): 89-96.
52. McRee AL, **Shoben AB**, Bauermeister JA, Katz ML, Paskett ED, Reiter PL. (2018). "Outsmart HPV: Acceptability and short-term effects of a web-based HPV vaccination intervention for young adult gay and bisexual men." *Vaccine*. 36(52): 8150-8164.
53. Presser BE, Katz ML, **Shoben AB**, Moore D, Ruffin MT, Paskett ED, Reiter PL. (2018). "Effects of an Education Intervention about HPV Self-Testing for Healthcare Providers and Staff." *J Cancer Educ*. 33(5): 954-959.
54. Klein EG, Quisenberry AJ, **Shoben AB**, Thompson T, Htut S, Foraker RE, Lai AM, Slater MD. (2018). "Testing a Brief Web-based Intervention to Increase Recognition of Tobacco Constituents." *Tob Reg Science*. 4(6): 83-94.
55. Quisenberry AJ, Scott AE, **Shoben AB**, Ferketich AK, Cooper SE, Berman M, Peters E, Wewers ME, Klein EG. (2018). "Health Literacy and Attention to Cigarette Health Warning Labels among Rural Smokers." *Tob Reg Science*. 4(6): 38-46.
56. Ruppert AS*, **Shoben AB**. (2018). "Overall success rate of a safe and efficacious drug: Results using six phase 1 designs, each followed by standard phase 2 and 3 designs.." *Contemp Clin Trials Commun*. 24: 40-50.

57. Loewenberg Weisband Y, Klebanoff M, Gallo MF, **Shoben A**, Norris AH. (2018). " Birth Outcomes of Women Using a Midwife versus Women Using a Physician for Prenatal Care." *J Midwifery Women's Health*. 63(4): 399-409.
58. Reiter PL, **Shoben AB**, McDonough D, Ruffin MT, Steinau M, Unger ER, Paskett ED, Katz ML. (2019) "Results of a Pilot Study of a Mail-Based Human Papillomavirus Self-Testing Program for Underscreened Women From Appalachian Ohio." *Sex Transm Dis*. 46(3): 185-190.
59. Klein EG, Quisenberry AJ, **Shoben AB**, Romer D, Peters E. (2019) "The Influence of Health Numeracy and Health Warning Label Type on Smoking Myths and Quit-Related Reactions." *Nicotine Tob Res*. 21(7): 974-978.
60. Peters E, Shoots-Reinhard B, Evans AT, **Shoben A**, Klein E, Tompkins MK, Romer D, Tusler M. (2019) "Pictorial Warning Labels and Memory for Cigarette Health-risk Information Over Time." *Ann Behav Med*. 53(4): 358-371.
61. Ballash GA, Jenkins MC, Kwok OCH, Dubey JP, **Shoben AB**, Robison TL, Kraft T, Shaffer EE, Dennis PM. (2019) "Effect of Urbanization on Neospora caninum Seroprevalence in White-Tailed Deer (*Odocoileus virginianus*)." *Ecohealth*. 16(1): 109-115.
62. Foraker RE, Bush C, Greiner MA, Sims M, Henderson K, Smith S, Bidulescu A, **Shoben AB**, Hardy NC, O'Brien E. (2019) "Distribution of Cardiovascular Health by Individual- and Neighborhood-Level Socioeconomic Status: Findings From the Jackson Heart Study." *Global Heart*. 14(3): 241-250.
63. Afzal MR, Daoud EG, Matre N, **Shoben A**, Burnside M, Gilliam C, Pinkhas D, Okabe T, Tyler J, Houmsse M, Kalbfleisch SS, Crestanello JA, Turner K, Weiss R, Hummel JD, Love CJ, Augustini RS. (2019) "Risk Stratification prior to lead Extraction and impact on major intraprocedural complications (RISE protocol)." *J Cardiovasc Electrophysiol*. 30(11): 2453-2459.
64. Nist MD, Pickler RH, Steward DK, Harrison TM, **Shoben AB**. (2019) "Inflammatory mediators of stress exposure and neurodevelopment in very preterm infants: Protocol for the stress neuro-immune study." *J Adv Nurs*. 75(10): 2236-2245.
65. Zigmont VA, **Shoben AB**, Lu B, Kaye GL, Clinton SK, Harris RE, Olivo-Marston SE. (2019) "Statin users have an elevated risk of dysglycemia and new-onset-diabetes." *Diabetes Metab Res Rev*. 35(8): e3189.
66. Lancaster KE, Lungu T, Bula A, Shea JM, **Shoben A**, Hosseinipour MC, Kohler RE, Hoffman IF, Go VF, Golin CE, Wheeler SB, Miller WC. (2020) "Preferences for Pre-exposure Prophylaxis Service Delivery Among Female Sex Workers in Malawi: A Discrete Choice Experiment." *AIDS Behav*. 24(5): 1294-1303.
67. Ilacqua A, Benedict J, **Shoben A**, Skotko BG, Matthews T, Benson B, Allain DC. (2020) "Alzheimer's disease development in adults with Down syndrome: Caregivers' perspectives." *Am J Med Genet A*. 182(1): 104-114.

68. Weber ZA, **Shoben A**, Anderson SE. (2020) "Impact of Life Events on Short-Term Change in BMI in Early and Middle Childhood." *Obesity (Silver Spring)*. 28(2): 347-352.
69. Brown SP, **Shoben AB**. (2020) "Information Growth for Sequential Monitoring of Clinical Trials with a Stepped Wedge Cluster Randomized Design and Unknown Intracluster Correlation." *Clinical Trials*. 17(2): 176-183.
70. Reiter PL, Gower AL, Kiss DE, Malone MA, Katz ML, Bauermeister JA, **Shoben AB**, Paskett ED, McRee AL. (2020) "A Web-Based Human Papillomavirus Vaccination Intervention for Young Gay, Bisexual, and Other Men Who Have Sex With Men: Protocol for a Randomized Controlled Trial." *JMIR Res Protoc*. 9(2): e16294.
71. Bailey BE, Andridge R, **Shoben AB**. (2020) "Multiple imputation by predictive mean matching in cluster-randomized trials." *BMC Med Res Methodol*. 20(1):72.
72. Shoots-Reinhard B, Erford B, Romer D, Evans AT, **Shoben A**, Klein EG, Peters E. (2020) "Numeracy and memory for risk probabilities and risk outcomes depicted on cigarette warning labels." *Health Psychol*. 39(8): 721-739.
73. Wesolowski R, Stover DG, Lustberg MB, **Shoben A**, et. al. (2020) "Phase I Study of Veliparib on an Intermittent and Continuous Schedule in Combination with Carboplatin in Metastatic Breast Cancer: A Safety and [18F]-Fluorothymidine Positron Emission Tomography Biomarker Study." *Oncologist*. 25(8):e1158-69.
74. Zhang P, **Shoben A**, Jackson R, Fernandez S. (2020) "Variance formulae for multiphase stepped wedge cluster randomized trial." *Stat Med*. 39(28): 4147-4168.
75. Gray DM 2nd, Emerson B, Reddy M, Zimmermann BJ, Hashi A, **Shoben A**, Reiter PL, Katz ML. "A Teachable Moment: Colorectal Cancer Screening Among Companions Waiting for Outpatients Undergoing a Colonoscopy." *J Cancer Educ*. (In Press)
76. Nist MD, Pickler RH, Harrison TM, Steward DK, **Shoben AB**. (2020) "Inflammatory predictors of neurobehavior in very preterm infants." *Early Hum Dev*. 147: 105078
77. Nist MD, **Shoben AB**, Pickler RH. (2020) "Early Inflammatory Measures and Neurodevelopmental Outcomes in Preterm Infants.." *Nurs Res*. 69(5S Suppl 1):S11-S20.
78. Nist MD, Harrison TM, Pickler RH, **Shoben AB**. (2020) "Measures of Stress Exposure for Hospitalized Preterm Infants." *Nurs Res*. 69(5S Suppl 1):S3-S10.
79. Burd A, Levine RL, Ruppert AS, Mims AS, Borate U, Stein EM, Patel P, Baer MR, Stock W, Deinger M, Blum W, Schiller G, Olin R, Litzow M, Foran J, Lin TL, Ball B, Boyiadzis M, Traer E, Odenike O, Arellano M, Walker A, Duong VH, Kovacovics T, Collins R, **Shoben AB**, Heerema NA, Foster MC, Vergilio JA, Brennan T, Vietz C, Severson E, Miller M, Rosenberg L, Marcus S, Yocum A, Chen T, Stefanos M, Druker B, Byrd JC. (2020) "Precision medicine treatment in

acute myeloid leukemia using prospective genomic profiling: feasibility and preliminary efficacy of the Beat AML Master Trial." *Nat Med.* 26(12): 1852-1858.

80. Aeilts AM, Carpenter KM, Hovick SR, Byrne L, **Shoben AB**, Senter L. "The impact of a cascade testing video on recipients' knowledge, cognitive message processing, and affective reactions: A formative evaluation." *J Genet Couns.* (In Press)

81. Drelles K, Pilarski R, Kandamurugu M, **Shoben AB**, Toland AE. (2021) "Impact of Previous Genetic Counseling and Objective Numeracy on Accurate Interpretation of a Pharmacogenetics Test Report." *Pub Hlth Genomics.* 24(1-2): 26-32.

Book Chapters

Abigail Shoben. (2009). "Interpreting Hypothesis Tests." In *Epidemiology and Biostatistics*. Edited by Bryan Kestenbaum. New York: Springer. 181-188. (editor reviewed)

Abigail Shoben. (2009). "Summary Measures in Statistics." In *Epidemiology and Biostatistics*. Edited by Bryan Kestenbaum. New York: Springer. 153-162. (editor reviewed)

Funding History

Current Support

UM1DA049417 NIH/NIDA (PI: Jackson) 04/17/2019 – 03/31/2023
Optimizing HEALing in Ohio Communities (OHIO)
Role: Co-Investigator

1R01AI127863-01, NIH (PI: Norris Turner) 08/09/2017-07/31/2021
Clinical and molecular epidemiology of the sexual transmission of Neisseria meningitides
Role: Co-Investigator

1R01CA226682-01, NIH/NCI (PI: Reiter) 04/01/2018-03/31/2022
A Randomized Controlled Trial of an HPV Vaccine Intervention for Young Sexual Minority Men
Role: Co-Investigator

R01DA048529, NIDA/CTP (MPI: Klein/Trapl/Quisenberry) 09/01/2019 – 08/31/2022
Impact of flavors on cigarillo use intentions, abuse liability and risk perceptions in youth and young adults.
Role: Co-Investigator

P01CA229143, NIH/NCI (PI: Paskett) 04/01/2019 – 03/31/2024
Improving Uptake of Cervical Cancer Prevention Services in Appalachia
Role: Co-Investigator, Core 3

Contract (PI: Wickizer) 01/01/2019-12/31/2021
Univ of Washington (Prime: PCORI)
Comparative effectiveness of two state payer strategies to prevent unsafe opioid prescribing and improve outcomes for injured workers with musculoskeletal injuries and pain
Role: Co-Investigator

R01CA217861, NIH/NCI (PI: Mays) 09/01/2020 – 08/31/2021
Optimizing Risk Messages to Promote Waterpipe Tobacco Cessation in Young Adults
Role: Co-Investigator

20YVNR35490079, AHA (MPI: Mohler/Wold/Klein/Wagener/Roberts) 07/01/2020 – 06/30/2022
Vaping's End through Research and Innovation for Youth (VERIFY).
Role: Co-Investigator

Completed Research Support

1 U01 PS005170-01, CDC (PI: Miller) 05/01/2017 – 01/30/2021
Syphilis epidemiology in Columbus, Ohio: a cohort and network study
Role: Co-Investigator

R01CA229082, NIH/NCI (PI: Mays) 08/01/2020 – 04/30/2021
Optimizing Hookah Tobacco Public Education Messages to Reduce Young Adult Use
Role: Co-Investigator

R21AG061496, NIH/NIA (PI: Katz) 02/15/2019 – 12/31/2020
Using audio and video brochures in a mail-based FIT outreach intervention
Role: Co-Investigator

5UM1CA186712, NCI (PI: Carson) 03/28/2014 – 02/29/2020
Experimental Therapeutics of Anti-Cancer Agents with Phase I Emphasis
Role: Co-Investigator

R01HD080866 (MPI: Smith/Petosa) 03/13/2015 - 02/28/2020
NIH/NICHD
A skill-based RCT for physical activity using peer mentors
Role: Co-Investigator

R01HL134544 (PI: Funderberg) 09/01/2016-06/30/2020
NHLBI
Cellular mediators of vascular inflammation in treated HIV infection
Role: Co-Investigator

Hillman (Rita and Alex) Foundation (PI: Smith) 01/01/2019 – 12/31/2019
Peer mentoring to middle school youth in Appalachia to improve lifestyle behaviors and health outcomes
Role: Co-Investigator

(Contract) (PI: Shoben) Beat AML <i>Statistical plan for the AML master trial and substudies</i> Role: Principal Investigator	04/01/2016-01/31/2019
5 R01 CA177292-02 (PI: Byrd / Johnson) NCI <i>Targeted Therapy for Lymphoid Malignancies</i> Role: Co-Investigator	12/10/2014 - 03/31/2018
OPP1162025 (PI: Norris) Bill and Melinda Gates Foundation <i>Reconceptualizing contraceptive need and barriers</i> Role: Co-Investigator	11/01/16-04/30/18
P50CA180908 (MPI: Wewers/Shields) NIH/National Cancer Institute <i>OSU Center of Excellence in Regulatory Tobacco Science (OSU-CERTS)</i> Role: Core C Co-Investigator	09/18/2013 - 08/31/2018
R21CA194831 (PI: Reiter) NIH/National Cancer Institute <i>Increasing HPV vaccine coverage among young adult gay and bisexual men</i> Role: Co-Investigator	07/01/2015-06/30/2017
1 UM1 CA186712-01 (PI: Grever) NCI <i>Experimental Therapeutics of Anti-Cancer Agents with Phase I Emphasis</i> Role: Co-Investigator	12/10/2014 - 02/28/2017
P50CA180908 (MPI: Wewers/Shields) NIH/National Cancer Institute <i>(Supplement) Tailoring and interactivity website features and their impacts on smokers' knowledge</i> Role: Co-Investigator	09/1/2015 - 08/31/2016
LLS 7004-11 (PI: Byrd) Leukemia & Lymphoma Society <i>SCOR - Experimental Therapeutics in Leukemia.</i> Role: Co-Leader, Core C (Clinical)	12/10/2014 - 09/30/2016
(no number) (PI: Wickizer) Ohio Medicaid Assessment Survey <i>Patient Centered Medical Homes and the Health of Ohio's Adults and Children</i> Role: Co-Investigator	10/1/2015 - 06/30/2016

(no number) (PI: Salsbery) Ohio Medicaid Assessment Survey <i>Maternal, Infant and Child Health in Ohio</i> Role: Co-Investigator	10/1/2015 - 06/30/2016
(no number) (PI: Foraker) Pfizer <i>Stroke Prevention in Healthcare Delivery EnviRonmEnts (SPHERE)</i> Role: Co-Investigator	01/01/2013 - 12/31/2014
R01CA129771 (PI: Wewers) NIH/National Cancer Institute <i>Tobacco cessation interventions with Ohio Appalachian smokers</i> Role: Co-Investigator	09/20/2012 - 12/31/2014
3R01CA129771-03S1 (PI: Wewers / Klein) NIH/National Cancer Institute and FDA <i>(Supplement) Health warning label impact on Appalachian tobacco users: An eye tracking study</i> Role: Co-Investigator	09/20/2012 - 12/31/2014
6114210/RFS900196 (PI: Shoben) University of Massachusetts Medical School Prime: NIH, 1 R01 CA136888-01 (Ockene) <i>RCT to Improve Tobacco Treatment Skills of Medical Students</i> Role: PI (subcontract)	09/20/2012 - 05/13/2014
R21OH010323 (PI: Dembe) NIH/National Institute for Occupational Safety & Health <i>A process for estimating the association of occupation and chronic disease</i> Role: Co-Investigator	07/01/2012 - 06/30/2014
G-1213-07-0343 (PI: Ranbom) Ohio Dept of Job & Family Services <i>MEDTAPP Children's access to psychiatric services</i> Role: Co-Investigator	12/23/2011 - 06/30/2012
Award 076000 (PI: Shoben) Research Institute at Nationwide Children's Hospital <i>Ohio perinatal research network</i> Role: PI (subcontract)	01/01/2011 - 12/31/2011

Presentations

*(first author or primary mentor to student first author (denoted with *) only)*

Shoben AB, Rudser KD, de Boer IH, Young B, Kestenbaum B. "Oral calcitriol and mortality in nondialyzed patients with chronic kidney disease." (2007). American Society of Nephrology Annual Meeting. San Francisco, CA. (peer reviewed)

Shoben AB, Rudser KD, Emerson SS. "Estimates of Information Growth Accommodating Model Misspecification." (2008). International Biometric Conference. Dublin, Ireland.

Shoben AB, Rudser KD, Emerson SS. "Estimates of Information Growth Accommodating Model Misspecification." (2008). Joint Statistical Meetings. Denver, CO.

Shoben AB, Kestenbaum BR, Ix JH, Peralta CA, Daniel KR, Sane DC, Lima JA, Siscovick DS, de Boer IH. "Serum 25-hydroxyvitamin D concentration and left ventricular mass in the Multi-Ethnic Study of Atherosclerosis." (2009). American Society of Nephrology Annual Meeting. San Diego. (peer reviewed)

Shoben AB, Levin G, de Boer IH, Young B, Ayers E, Galvin G, Kestenbaum B. "Variation in Response to Oral Calcitriol among Patients with Chronic Kidney Disease." (2009). American Society of Nephrology Annual Meeting. San Diego, CA. (peer reviewed)

Shoben AB, Rudser KD, Emerson SS. "Estimates of Information Growth in Longitudinal Clinical Trials." (2009). WNAR Annual Meeting. Portland, OR.

Shoben AB, Rudser KD, Emerson SS. "Estimates of Information Growth in Longitudinal Clinical Trials." (2009). Joint Statistical Meetings. Washington, D.C.

Shoben AB, Kestenbaum B, Siscovick DS, de Boer IH. "Seasonal Variation in 25-Hydroxyvitamin D in the Cardiovascular Health Study." (2010). American Society of Nephrology Annual Meeting. Denver, CO. (Peer Reviewed)

Shoben AB, Emerson SS. "Mean-Variance Relationships in Longitudinal Group Sequential Trials." (2011). ENAR Spring Meeting. Miami, FL.

Shoben AB, Emerson SS. "Mean-Variance Relationships in Longitudinal Group Sequential Trials." (2011). Joint Biostatistics Symposium. Case Western Reserve University. Cleveland, OH. (Invited)

Shoben AB, Emerson SS. "Mean-Variance Relationships in Longitudinal Group Sequential Trials." (2011). Joint Statistical Meetings. Miami, FL.

Shoben AB. "Meta-analysis of one outcome from group sequential trials with composite outcomes: Are standard methods appropriate?" (2012). ENAR Spring Meeting. Washington, DC.

Shoben AB. "Meta-analysis of one outcome from group sequential trials with composite outcomes: Are standard methods appropriate?" (2012). Joint Statistical Meetings. San Diego, CA.

Shoben AB. "Meta-analysis of one outcome from group sequential trials with composite outcomes: Are standard methods appropriate?" (2013). Society for Clinical Trials Annual Meeting. Boston, MA.

Bai S*, Nagaraja HN, **Shoben AB.** "Simultaneous Inference of Method Agreement and Rater Reliability Through General Clustered Repeated-Measures Data." (2013). Joint Statistical Meetings. Montreal, QC.

Shoben AB. "Particular Challenges of Sequential Analysis in Cluster-Randomized Trials." (2013). Joint Statistical Meetings. Montreal, QC.

Shoben AB, Brown, SP. "Particular challenges of sequential analysis in cluster randomized trials." (2014). Society for Clinical Trials Annual Meeting. Philadelphia, PA.

Shoben AB, Brown, SP. "Interim Monitoring of Cluster Randomized Trials: Benefits and Challenges." (2014) Joint Statistical Meetings. Boston, MA.

Ruppert AS*, **Shoben AB.** "The Relationship Among Toxicity, Response, and Survival Profiles Ultimately Influence Calling a Beneficial Experimental Drug Favorable Under Standard Phase I, II, and III Clinical Trial Designs." (2015). ENAR Spring Meeting. Miami, FL.

Shoben AB. "Consent Bias in Cluster Randomized Trials: Should We Be Concerned?" (2015). Society for Clinical Trials Annual Meeting. Arlington, VA.

Ruppert AS*, **Shoben AB.** "The Relationship Among Toxicity, Response, and Survival Profiles Ultimately Influence Calling a Beneficial Experimental Drug Favorable Under Standard Phase I, II, and III Clinical Trial Designs." (2015). Society for Clinical Trials Annual Meeting. Arlington, VA.

Shoben AB, Andridge R, Murray DM. "Consequences of Misspecified Clusters in Group Randomized Trials." (2015). Joint Statistical Meetings. Seattle, WA.

Bailey B*, **Shoben AB,** Foraker RE. "The Impact of Modeling Strategy and Informative Censoring on Estimated Readmission Risk." (2015). Joint Statistical Meetings. Seattle, WA.

Dong R*, **Shoben AB.** "Stepped Wedge Cluster Randomized Controlled Trials with Two Layers of Clustering: Designs and Comparisons of Power." (2016). Society for Clinical Trials Annual Meeting. Montreal, QC.

Bailey B*, **Shoben AB.** "Analyzing Binary Outcome Data from an Individually Randomized Group Treatment Trial." (2016). Society for Clinical Trials Annual Meeting. Montreal, QC.

Shoben AB. "Efficient Designs for Comparing Control, Treatment, and Treatment Plus in Randomized Trials." (2016). Society for Clinical Trials Annual Meeting. Montreal, QC.

Dong R*, **Shoben AB.** "Stepped Wedge Cluster Randomized Controlled Trials with Two Layers of Clustering: Designs and Comparisons of Power." (2016). Joint Statistical Meetings. Chicago, IL.

Bailey B*, **Shoben AB.** "Analyzing Binary Outcome Data from a Partially Clustered Design." (2016). Joint Statistical Meetings. Chicago, IL.

Shoben AB. "Consequences of Misspecified Clusters in Group Randomized Trials." (2016). FDA – CDER Division of Biometrics II. Silver Spring, MD

Shoben AB. (Invited Speaker). "Estimating Consent Bias in Group Randomized Trials." (2016). University of Akron. Akron, OH.

Ruppert AS*, **Shoben AB.** "Overall Success Rate of a Safe and Efficacious Drug: Results Using Six Phase I Designs, Each Followed by Phase II and III Trials Using Standard Designs." (2017). Society for Clinical Trials Annual Meeting. Liverpool, England.

Bailey B*, Andridge RR, **Shoben AB.** "Investigating Multiple Imputation in Cluster Randomized Trials." (2017). Society for Clinical Trials Annual Meeting. Liverpool, England.

Shoben AB. "Tradeoffs of a randomize, then consent approach to improving cluster participation rates in cluster randomize trials." (2017). Society for Clinical Trials Annual Meeting. Liverpool, England.

Shoben A. (Invited Panelist). "Data and Methods for Evaluating the Impact of Opioid Formulations with Properties Design to Deter Abuse in the Postmarket Setting: A Scientific Discussion of Present and Future Capabilities." (2017). FDA Public Workshop. Silver Spring, MD.

Bailey B*, Andridge RR, **Shoben AB.** "Investigating Multiple Imputation in Cluster Randomized Trials." (2017). Joint Statistical Meetings, Baltimore, MD.

Shoben AB. "Tradeoffs of a randomize, then consent approach to improving cluster participation rates in cluster randomize trials." (2017) Joint Statistical Meetings, Baltimore, MD.

Shoben A. (Invited Panelist). "Networking Among Junior Statisticians: Peer Mentoring and Strategies to Promote One Another." (2017). Women in Statistics and Data Science Conference. San Diego, CA.

Shoben AB. " Design Considerations When Comparing Control, Treatment, and Treatment Plus in Randomized Trials." (2018) Joint Statistical Meetings, Vancouver, Canada.

Professional Service

Federal Government

NIDDK, Member, Data Safety Monitoring Board, TiME Trial. 2014-2017.

FDA. Member, Anesthetic and Analgesic Drug Products Advisory Committee. Appointed 2015.

FDA, Temporary Member, Non Prescription Drugs Advisory Committee, September 2019.

FDA, Temporary Member, Endocrinologic and Metabolic Drugs Advisory Committee, September 2019.

NIH. Member, Data Safety Monitoring Board, Effects of Electronic Cigarettes on Smokers with Mild to Moderate Chronic Obstructive Pulmonary Disease. 2018- 2020. (trial suspended fall 2019)

Professional Organizations

Abstract Peer Reviewer, American Society of Nephrology, Annual Meeting, 2009.

Society for Clinical Trials, Organizer and Chair of Invited Session, “Design Challenges of Randomized Trials in Emergency Medicine,” 2013.

American Statistical Association, JSM Docent. 2014, 2015.

NSF, Ad hoc Grant Reviewer, 2015.

PCORI Grant Reviewer, Appointed 2016

American Indian-Alaska Native Clinical Translational Research Program (AI-AN CTRP), Ad hoc Grant Reviewer, 2016

Society for Clinical Trials, Member, Program Committee. 2015-2020.

Society for Clinical Trials, Program Committee Co-Chair. 2018-2019.

Society for Clinical Trials, Program Committee Chair. 2019-2020.

Women in Statistics and Data Science, Organizer and Chair of Invited Session, “. Communication in the digital age: Successes and challenges of online communication,” 2019.

Memberships

American Statistical Association (2009-present)

International Biometrics Society (WNAR: 2008-2010; ENAR: 2011-2015)

Society for Clinical Trials (2013-present).

Journal Service

Appointed Statistical Reviewer:

Kidney International, Appointed 2015

JAMA – Network Open, Appointed 2018

Ad hoc Peer Reviewer

American Journal of Epidemiology
American Statistician
Biometrics
BMC Medical Research Methodology
BMC Public Health
BMJ Open
Clinical Endocrinology
Epidemiology
International Journal of Biostatistics
International Journal of Environmental Research and Public Health
Journal Royal Statistical Society
Journal of Visualized Experiments
Molecules
Nicotine & Tobacco Research
Nutrients
Nutrition
Ohio Journal of Public Health
Pediatric Nursing
Public Health Nursing
Psycho-Oncology
Statistics in Biopharmaceutical Research
Trials

Academic Service

Division of Biostatistics, MS/MPH Admissions Committee, Member, 2010-2011, 2014-2015
Division of Biostatistics, MS/MPH Admissions Committee, Chair, 2011-2014
Division of Biostatistics, Biostatistics Waiver Exam Committee, Chair, 2011-2018
Division of Biostatistics, Biostatistics Waiver Exam Committee, Member, 2018-2020
Division of Biostatistics, Qualifying Exam Committee (other divisions), Member, 2011-2018
Division of Biostatistics, Qualifying Exam Committee (biostatistics), Member, 2011-2016
Division of Biostatistics, Faculty Search Committee, Member, 2017-2018, 2021-present
College of Public Health, Awards Committee, Member, 2010-2013
College of Public Health Graduate Studies Committee, Member, 2016-2019
College of Public Health Diversity and Inclusion Committee, Member, 2012-2016
College of Public Health, Champions of Public Health Award Committee, Member, 2014, 2016
College of Public Health, Data Analytics Hiring Committee, Member, 2014-2015
College of Public Health, Open Faculty Search Committee, Member, 2016-2018
College of Public Health, Epidemiology Faculty Search Committee, Member, 2020-2021
Interdisciplinary Program in Biostatistics, Curriculum Committee, Member, 2015-2018
Interdisciplinary Program in Biostatistics, Qualifying Exam Committee, Member, 2016-2017
Interdisciplinary Program in Biostatistics, Graduate Studies Committee, Member, 2018-2020
Interdisciplinary Program in Biostatistics, Graduate Studies Committee, Vice Chair, 2020-present
Interdisciplinary Program in Biostatistics, Admissions Committee, Member, 2020-present
Interdisciplinary Program in Biostatistics, Qualifying Exam Committee, Chair, 2021-present

The Ohio State University, College of Public Health Dean Search Committee, Member, 2018-2019

Teaching History

Formal Courses

Design and Analysis of Studies in the Health Sciences I (PUBHBIO 701 / 6210).

Autumn 2010 (57 students); Winter 2011 (26 students); Autumn 2012 (64 students); Winter 2012 (31 students); Autumn 2013-1 (59 students); Autumn 2013-2 (54 students); Spring 2014 (38 students); Autumn 2016 (100 students; 100% distance)

Design and Analysis of Clinical Trials (PUBHBIO 7215).

Autumn 2017 (15 students)

Applied Longitudinal Data Analysis (PUBHBIO 624 / 7230).

Autumn 2011 (15 students); Spring 2014 (29 students); Spring 2016 (28 students); Spring 2018 (30 students); Spring 2019 (16 students); Spring 2020 (20 students); Spring 2021 (22 students)

Advanced Longitudinal Data Analysis (PUBHBIO 8230).

Spring 2013 (8 students); Spring 2015 (5 students); Spring 2017 (5 students)

Advising and Formal Mentoring

Ph.D. Dissertation Advisor (biostatistics)

Shasha Bai (co-advised with Haikady Nagaraja; 2012-2014)

Amy Stark (2014-2017)

Ranran Dong (2015-2017)

Brittney Bailey (co-advised with Rebecca Andridge; 2014-2018)

Ph.D. Dissertation Committee Member

J. Phil Harrop (HSMP; 2011-2012)

David Muhlestein (HSMP; 2011-2013)

Patrick Lai (Oral Biology; 2011-2012; candidacy exam only)

Chris Wilks (HSMP; 2011-2015)

Rachel Tumin (Epidemiology; 2012-2015)

Ashley Weber (Nursing; 2012-2016)

Marcia Nishicka (EHS; 2012-2016)

William Olesiuk (HSMP; 2013; dissertation committee only)

Tiasha Letostak (HSMP; 2013-2015)

Melissa Bentley (Epidemiology; 2013-2016)

Rory Weier (Epidemiology; 2014-2015)

Victoria Zigmont (Epidemiology; 2014-2015)

Yiska Weisband (Epidemiology; 2014-2017)

Marika Paul (HSMP; 2015-2017)

Allahna Esber (Epidemiology; 2015-2016; dissertation committee only)

Kierra Barnett (HBHP; 2014-2019)
Marliese Nist (Nursing; 2016-2019)
Devin Laurent (Kinesiology; 2016-2020)
Jessica Londeree Saleska (Epidemiology; 2017-2018)
Courtney Dewart (Epidemiology; 2018-2019)
Robert Hood (Epidemiology; 2018-2020)
Xiaochen Zhang (Epidemiology; 2018-present)
Brittney Butler (Epidemiology; 2018-present)
Christian Mpody (Epidemiology; 2018-2020)
Zach Weber (Epidemiology; 2019-present)
Brent Emerson (HBHP; 2019-present)
Payal Desai (Epidemiology; 2020-present)
Danielle Tyson (Epidemiology; 2020-present)

Masters Student Advisor

Jesse Husk (MPH, biostatistics; 2012-2014)
Yvonne Efebera (MPH, PEP; 2012-2014)
Alison Walker (MPH, PEP; 2012-2015)
Mirela Angelina (MPH, biostatistics; 2016-2018)

Masters Student Committee Member

Tatiana Gavrilina (MPH, biostatistics; 2011)
Greg Ballash (MPH, VPH; 2011)
Tara Carmack (MS, biostatistics; 2012)
Courtney Darrington (MPH, VPH; 2012)
Sarah Anderson (MS, biostatistics; 2013)
Ally Heydinger (MPH, HBHP; 2014)
Genevieve Davidson (MPH, HBHP; 2014)
Kevin Strobino (MPH, Epidemiology; 2014-2015)
Tonni Oberly (MPH, HBHP; 2015-2016)
Samantha Chavez (MS, Epidemiology; 2016-2017)

Undergraduate Student Senior Honors Thesis Committee Member

Elana Curry (Public Health; 2015-2016)