

# Whitney E. Zahnd, PhD

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Present Title and Affiliation: Assistant Professor, Tenure Track  
Department of Health Management and Policy  
College of Public Health  
University of Iowa

Adjunct Research Assistant Professor  
Rural & Minority Health Research Center  
Department of Epidemiology and Biostatistics  
Arnold School of Public Health  
University of South Carolina

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Website Links: [NIH Bibliography](#) \* [Google Scholar](#) \* [ResearchGate](#) \* [LinkedIn](#) \* [Twitter](#)

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## EDUCATION

**PhD in Community Health** May 2018  
University of Illinois at Urbana-Champaign, College of Applied Health Sciences,  
Department of Kinesiology and Community Health, Urbana, Illinois  
Dissertation: "Disparities in Breast Cancer Subtype, Staging, and Access to Mammography  
Services in the Lower Mississippi Delta Region" (Chair: Karin A. Rosenblatt, PhD)

**MS in Community Health (Epidemiology)** May 2007  
University of Illinois at Urbana-Champaign, College of Applied Health Sciences,  
Department of Kinesiology and Community Health, Urbana, Illinois  
Thesis: "Consumption of Caffeine and Its Association to Depression"  
(Chair: Karin A. Rosenblatt, PhD)

**BS in Microbiology** May 2005  
University of Illinois at Urbana-Champaign, College of Liberal Arts & Sciences,  
Department of Molecular and Cellular Biology, Urbana, Illinois

## POSTGRADUATE EDUCATION

University of South Carolina August 2018-July 2019  
Arnold School of Public Health  
Rural & Minority Health Research Center  
Mentor: Jan M. Eberth, PhD

## CERTIFICATIONS

Certificate in the Foundations of Teaching 2016  
University of Illinois Urbana-Champaign Center for Innovation in Teaching and Learning

## **ACADEMIC APPOINTMENTS, CURRENT**

Assistant Professor (Tenure-track) March 2021-present  
Department of Health Management and Policy  
College of Public Health  
University of Iowa, Iowa City, IA

Adjunct Research Assistant Professor, April 2021-present  
Department of Epidemiology and Biostatistics,  
Rural & Minority Health Research Center,  
Arnold School of Public Health,  
University of South Carolina, Columbia, SC

## **ACADEMIC APPOINTMENTS, PREVIOUS**

Co-Director May 2020-March 2021  
Big Data Health Science Center Geospatial Core,  
Arnold School of Public Health,  
University of South Carolina, Columbia, SC

Research Assistant Professor August 2019-March 2021  
South Carolina Rural & Minority Health Research Center,  
Arnold School of Public Health,  
University of South Carolina, Columbia, SC

Post-Doctoral Fellow August 2018-July 2019  
South Carolina Rural & Minority Health Research Center,  
Arnold School of Public Health,  
University of South Carolina, Columbia, SC

Adjunct Instructor, August 2017-July 2018  
Department of Family and Community Medicine  
Southern Illinois University School of Medicine, Springfield, IL

Senior Research Development Coordinator, January 2017-July 2018  
Office of Population Science and Policy,  
Southern Illinois University School of Medicine, Springfield, IL

Research Development Coordinator, July 2013-December 2016  
Center for Clinical Research, Statistics and Research Informatics Core/  
Population Health Science Program  
Southern Illinois University School of Medicine, Springfield, IL

Clinical Research Specialist, July 2012-June 2013  
Center for Clinical Research, Statistics and Research Informatics Core  
Southern Illinois University School of Medicine, Springfield, IL

Researcher III, July 2010-June 2012  
Center for Clinical Research, Statistics and Research Informatics Core  
Southern Illinois University School of Medicine, Springfield, IL

Researcher III, January 2009-June 2010  
Department of Internal Medicine, Division of Rheumatology,

Southern Illinois University School of Medicine, Springfield, IL

Researcher II,  
Department of Internal Medicine, Division of Rheumatology,  
Southern Illinois University School of Medicine, Springfield, IL

June 2007-December 2008

Graduate Research Assistant,  
Department of Kinesiology and Community Health,  
University of Illinois at Urbana-Champaign, Urbana, IL

August 2006-May 2007

Graduate Teaching Assistant,  
Department of Kinesiology and Community Health,  
University of Illinois at Urbana-Champaign, Urbana, IL

August 2005- May 2007

### OTHER RELEVANT WORK EXPERIENCE

Emergency Management Intern,  
City of Champaign Fire Department, Champaign, IL

May 2006-September 2006

Certified Pharmacy Technician,  
Walgreens Pharmacy, Champaign, IL

May 2002-September 2006

### HONORS AND AWARDS

National Rural Health Association Rural Health Fellow	2021
Top Disparities Poster at the American Society of Preventive Oncology virtual conference	2020
Best of <i>Cancer Epidemiology Biomarkers and Prevention</i> selection for article "Rural-Urban Differences in Cancer Incidence and Trends in the United States"	2020
Exceptional Reviewer Designation, <i>Journal of Rural Health</i>	2019,2020
Frank J. Toth Research Award (SIU School of Medicine)	2017
American Association for Cancer Research Scholar-in-Training Travel Award	2016, 2017
University of Illinois Dean's List	2004-2005
University of Illinois College of Liberal Arts and Sciences James Scholar	2001-2002
Illinois Merit Scholarship	2001

### PUBLICATIONS

#### Peer-Reviewed Publications (Published or In Press)

(numbered in chronological order; listed in reverse chronological order)

\*Indicates a student or medical resident co-author

+ Indicates that I served as senior/corresponding author of a student-led paper

73. Eberth JM, **Zahnd WE**, Josey MJ, Schootman M, Hung P, Probst JC. Trends in Spatial Access to Colonoscopy in South Carolina, 2000-2014. *Spatial and Spatio-temporal Epidemiology*. <https://doi.org/10.1016/j.sste.2021.100414>.

72. Benavidez GA\*, Zgodic A\*, **Zahnd WE**, Eberth JM. Disparities in Meeting USPSTF Breast, Cervical, and Colorectal Cancer Screening Guidelines Among Women in The United States: An Analysis of 2018 BRFSS Data. *Preventing Chronic Diseases*. In Press.

71. **Zahnd WE**, Murphy C\*, Knoll M\*, Benavidez GA\*, Day K\*, Ranganathan R\*, Luke P\*, Zgodic A\*, Shi K, Merrell MA, Crouch EL, Brandt HM, Eberth JM. The Intersection of Rural Residence and Minority Race/Ethnicity in Cancer Disparities in the United States. *International Journal of Environmental Research & Public Health*. 2021; 18(4):1384. <https://doi.org/10.3390/ijerph18041384>

70. Zgodic A\*, **Zahnd WE**, Advani S, Eberth JM. Low-Dose CT Lung Cancer Screening Uptake: A Rural-Urban Comparison. *Journal of Rural Health*. 2021 Mar 18. doi: 10.1111/jrh.12568. Online ahead of print.
69. Adams SA, **Zahnd WE**, Ranganathan R\*, Hung P, Brown M, Truman S\*, Biesecker C\*, Kirksey V\*, Eberth JM. Rural and Racial Disparities in Colorectal Cancer Incidence and Mortality in South Carolina, 1996 – 2016. *Journal of Rural Health*. In Press.
68. Ranganathan R\*, **Zahnd WE+**, Harrison SE, Brandt HM, Adams SA, Eberth JM. Spatial Access to Vaccine for Children Providers in South Carolina: Implications for HPV Vaccination. *Preventing Chronic Diseases*. 2020;17:200300. DOI: <http://dx.doi.org/10.5888/pcd17.200300>
67. Hung P, **Zahnd WE**, Brandt HM, Adams SA, Wang S, Eberth JM. Cervical Cancer Survival and Time to Treatment Initiation: the Role of Residential Proximity to Cancer Care. *Gynecologic Oncology*. 2020 Oct 17:S0090-8258(20)34014-2. doi: 10.1016/j.ygyno.2020.10.006. Online ahead of print.
66. **Zahnd WE**, Josey MJ\*, Schootman M, Eberth JM. Spatial Accessibility to Colonoscopy and Its Role in Predicting Late-Stage Colorectal Cancer. *Health Services Research*. 2020 Sep 20. doi: 10.1111/1475-6773.13562. Online ahead of print.
65. **Zahnd WE**, Gomez SL, Steck SE, Brown MJ, Ganai S, Zhang J, Adams SA, Berger FG, Eberth JM. Rural-Urban and Racial/Ethnic Trends and Disparities in Early-Onset and Average-Onset Colorectal Cancer. *Cancer*. 2020 Oct 28. doi: 10.1002/cncr.33256. Online ahead of print.
64. Zgodic A\*, **Zahnd WE**, Miller DP, Studts JL, Eberth JM. Predictors of Lung Cancer Screening Utilization in a Population-Based Survey. *Journal of the American College of Radiology*. 2020 Jul 16:S1546-1440(20)30664-5. doi: 10.1016/j.jacr.2020.06.015. Online ahead of print.
63. **Zahnd WE**, Harrison S, Messersmith A, Stephens H\*, Brandt HM, Hastings T, Eberth JM. Expanding Access to HPV Vaccination in South Carolina through Community Pharmacies: a Geospatial Analysis. *Journal of the American Pharmacists Association*. 2020 Jun 21:S1544-3191(20)30239-9. doi: 10.1016/j.japh.2020.05.005. Online ahead of print.
62. Odahowski CL\*, Crouch EL, **Zahnd WE+**, Probst JC, McKinney SH, Abshire D. Rural-Urban Differences in Educational Attainment among Registered Nurses: Implications for Achieving an 80% BSN Workforce. *Journal of Professional Nursing*. <https://doi.org/10.1016/j.profnurs.2020.04.008>.
61. Probst JC, **Zahnd WE**, Hung P, Eberth JM, Crouch EL, Merrell MA. Rural-urban mortality disparities: variations across causes of death and race/ethnicity, 2013 – 2017. *American Journal of Public Health*. 2020 Sep;110(9):1325-1327. doi: 10.2105/AJPH.2020.305703. Epub 2020 Jul 16.
60. **Zahnd WE**, Crouch EL, Probst JC, McKinney SH, Abshire D, Eberth JM. Factors Associated with Perceived Job Preparedness among Registered Nurses: Results from a National Survey. *Journal of Nursing Administration*. 2020; 50 (5):251-253.
59. Biesecker C\*, **Zahnd WE+**, Brandt HM, Adams SA, Eberth JM. A Bivariate Mapping Tutorial for Cancer Control Resource Allocation Decisions and Interventions. *Preventing Chronic Diseases*. 2020;17: 190254. DOI: <http://dx.doi.org/10.5888/pcd17.190254>
58. Odahowski CL\*, **Zahnd WE**, Zgodic A, Edward J, Hill L, Davis MM, Perry CK, Shannon J, Farris P, Wheeler SB, Vanderpool R, Eberth JM. Financial Hardship among Rural Cancer Survivors in the U.S. *Preventive Medicine*. 2019 Dec;129S:105881. doi: 10.1016/j.ypmed.2019.105881.

57. **Zahnd WE**, Sherman RL, Klonoff-Cohen H, McLafferty SL, Farner S, Rosenblatt KA. Breast Cancer Staging By Subtype in the Lower Mississippi Delta Region States. *Cancer Epidemiology*. 2019 Dec;63:101624. doi: 10.1016/j.canep.2019.101624. Epub 2019 Nov 1.
56. Hung P, Deng S\*, **Zahnd W**, Adams S, Olatosi B, Crouch E, Eberth JM. Urban-rural disparities in residential proximity to colorectal and cervical cancer care specialists. *Cancer*. 2020 Mar 1;126(5):1068-1076. doi: 10.1002/cncr.32594. Epub 2019 Nov 8.
55. Probst J, **Zahnd W**, Breneman C. Declines in pediatric mortality fall short for rural children. *Health Affairs*. 2019 Dec;38(12):2069-2076. doi: 10.1377/hlthaff.2019.00892. Epub 2019 Nov 20.
54. Eberth JM, **Zahnd WE**, Adams SA, Friedman DB, Wheeler SB, Hebert JR. Cancer Mortality-to-Incidence Ratios by US Congressional District: Implications for Epidemiologic, Dissemination and Implementation Research and Public Health Policy. *Preventive Medicine*. 2019 Dec;129S:105849. doi: 10.1016/j.ypmed.2019.105849. Epub 2019 Nov 1.
53. Spencer JC\*, Rotter JS\*, Eberth JM, **Zahnd WE**, Vanderpool RC, Ko LK, Davis MM, Olshan AF, Wheeler SB. Employment changes following cancer diagnosis: the effects of race and place. *Journal of the National Cancer Institute*. <https://doi.org/10.1093/jnci/djz197>
52. **Zahnd WE**, McLafferty SL, Eberth JM. Multilevel Analysis in Rural Cancer Control in the United States: A Conceptual Framework and Methodological Implications. *Preventive Medicine*. 2019 Dec;129S:105835. doi: 10.1016/j.ypmed.2019.105835. Epub 2019 Sep 11.
51. Josey MJ\*, Odahowski CL\*, **Zahnd WE**, Schootman M, Eberth JM. Disparities in utilization of medical specialist for colonoscopy. *Health Equity*. 2019; 3(1):464-471. DOI: 10.1089/heq.2019.0052.
50. Bolinski R\*, Ellis K\*, **Zahnd WE**, Walters S, McLuckie C\*, Schneider J, Rodriguez C, Ezell J\*, Friedman S, Pho MT, Jenkins WD. Social norms associated with opioid misuse in rural communities: a systematic review. *Translational Behavioral Medicine*. 2019 Nov 25;9(6):1224-1232. doi: 10.1093/tbm/ibz129.
49. **Zahnd WE**, Askelson N, Vanderpool RC, Stradtman L, Edward J, Farris P, Petermann V\*, Eberth JM. Challenges of Using Population-Based, Nationally Representative Surveys to Assess Rural Cancer Disparities. *Preventive Medicine*. 2019 Dec;129S:105812. doi: 10.1016/j.ypmed.2019.105812. Epub 2019 Aug 15.
48. Eberth JM, Crouch E, Josey MJ\*, **Zahnd WE**, Adams SA, Stiles B, Schootman M. Rural-urban differences in access to thoracic surgery in the United States, 2010-2014. *Annals of Thoracic Surgery*. 2019 Oct;108(4):1087-1093. doi: 10.1016/j.athoracsur.2019.04.113. Epub 2019 Jun 22.
47. **Zahnd WE** and Eberth JM. Lung Cancer Screening Utilization: A Behavioral Risk Factor Surveillance System Data Analysis. *American Journal of Preventive Medicine*. 2019 Aug;57(2):250-255. doi: 10.1016/j.amepre.2019.03.015. Epub 2019 Jun 24.
46. McDow A\*, **Zahnd WE**, Angelos P, Mellinger J, Ganai S. Impact of Rurality on National Trends in Thyroid Cancer Incidence and Long-term Survival. *Journal of Rural Health*. 2019 May 17. doi:10.1111/jrh.12374, [Epub ahead of print]
45. **Zahnd WE**, Sherman RL, Klonoff-Cohen H, McLafferty SL, Farner S, Rosenblatt KA. Disparities in Breast Cancer Subtypes among Women in the Lower Mississippi Delta Region States. *Cancer Causes & Control*. 2019 Jun;30(6):591-601. doi: 10.1007/s10552-019-01168-0.

44. **Zahnd WE**, Davis MM, Rotter JS\*, Vanderpool RC, Perry CK, Shannon J, Ko LK, Wheeler SB, Odahowski CL\*, Farris PE, Eberth JM. Rural-Urban Differences in Financial Burden among Cancer Survivors: An Analysis of a Nationally Representative Survey. *Supportive Care in Cancer*. 2019 Dec;27(12):4779-4786. doi: 10.1007/s00520-019-04742-z. Epub 2019 Apr 10.
43. McLuckie C\*, Pho MT, Ellis K\*, Navon L, Walblay K, Jenkins WD, Rodriguez C, Kolak MA, Chen YT, Schneider J, **Zahnd WE\***. Identifying Areas with Disproportionate Local Health Department Services Relative to Opioid Overdose, HIV and Hepatitis C Diagnosis Rates: A Study of Rural Illinois. *International Journal of Environmental Research and Public Health*. 2019; 16(6), 989; <https://doi.org/10.3390/ijerph16060989>
42. Fogleman AJ, **Zahnd WE**, Lipka AE, Mahli RS, Ganai S, Delfino KR, Jenkins WD. Knowledge, Attitudes, and Perceived Barriers towards Genetic Testing across Three Rural Illinois Communities. *Journal of Community Genetics*. <https://doi.org/10.1007/s12687-019-00407-w> 2019 January 24.
41. Assel M, Sjoberg D, Elders A, Wang X, Huo D, Botchway A, Delfino K, Fan Y, Zhao Z, Koyama T, Hollenbeck B, Qin R, **Zahnd W**, Zabor EC, Kattan MW, Vickers AJ. Guidelines for reporting of statistics for clinical research in urology. *BJU International*. <https://doi.org/10.1111/bju.14640>  
\*Also published in *European Urology* and the *Journal of Urology*
40. **Zahnd WE**, McLafferty SL, Sherman RL, Klonoff-Cohen H, Farner S, Rosenblatt KA. Spatial Accessibility to Mammography Services in the Lower Mississippi Delta Region States. *Journal of Rural Health*. 2019 Jan 28. doi: 10.1111/jrh.12349. [Epub ahead of print]
39. Owings AC\*, Fernandes SB, Olatoye MO, Fogleman AJ, **Zahnd WE**, Jenkins WD, Mahli RS, Lipka A. Population Structure Analyses Provide Insight into the Source Populations Underlying Rural Isolated Communities in Illinois. *Human Biology*. 2019 Feb 17;91(1):31-47. doi: 10.13110/humanbiology.91.1.05.
38. **Zahnd WE**, Mueller-Luckey GS, Fogleman AJ, Jenkins WD. Measuring rurality in the United States: do our measures and methods capture our intent? *Journal of Health Care for the Poor and Underserved*. 2019;30(1):70-79.
37. Deshpande M, **Zahnd WE**, Bandy L\*, Lorenson J\*, Fifer A. Spatial analysis of disparities in asthma treatment among adult asthmatics. *Research in Social and Administrative Pharmacy*. 2018 September 27  
. <https://doi.org/10.1016/j.sapharm.2018.09.020>
36. **Zahnd WE**, Rodriguez C, Jenkins WD. Rural-urban differences in human papillomavirus-associated cancer trends and rates. *Journal of Rural Health*. 2018 May 28. Doi:10.1111/jrh.12305. [Epub ahead of print].
35. Sturm EC\*, **Zahnd WE**, Mellinger JD, Ganai S. Survival Implications of Increased Utilization of Local Excision for cT1N0 Esophageal Cancer. *Annals of Surgery*. 2018 Apr 18. doi: 10.1097/SLA.0000000000002782. [Epub ahead of print]
34. Jenkins WD, Matthews A, Bailey A, **Zahnd WE**, Watson KS, Mueller-Luckey G, Molina Y, Crumly D, Patera J. Rural areas are disproportionately impacted by smoking and lung cancer. *Preventive Medicine Reports*. 2018; 10:200-203. <https://doi.org/10.1016/j.pmedr.2018.03.011>.
33. **Zahnd WE**, Jenkins WD, James AS, Izadi SR, Steward DE, Fogleman AJ, Colditz GA, Brard L. Utility and Generalizability of Multi-State, Population-Based Cancer Registry Data for Rural Cancer Surveillance Research in the United States. *Cancer Epidemiology Biomarkers & Prevention*. 2018 Nov;27(11):1252-1260. doi: 10.1158/1055-9965.EPI-17-1087. Epub 2018 Mar 21.

32. **Zahnd WE**, Fogleman AJ, Jenkins WD. Rural-urban disparities in staging of cancers with preventive opportunities. *American Journal of Preventive Medicine*. 2018 May;54(5):688-698. doi: 10.1016/j.amepre.2018.01.021. Epub 2018 Mar 15.
31. **Zahnd WE**, Jenkins WD, Shackelford J, Lobb R, Sanders J, Bailey A. Rural Cancer Screening and Faith Community Nursing in the Era of Affordable Care Act. *Journal of Health Care for the Poor and Underserved*. 2018; 29(1):71-80.
30. **Zahnd WE**, Hyon KS\*, Diaz-Sylvester P, Izadi SR, Colditz GA, Brard L. Rural-Urban Differences in Surgical Treatment, Regional Lymph Node Examination and Survival in Endometrial Cancer Patients. *Cancer Causes & Control*. 2018 Feb; 29(2):221-232. doi: 10.1007/s10552-017-0998-4.
29. Romanelli M\*, Issa T\*, **Zahnd W**, Dynda D, Alanee S. Impact of County Rurality and Urologist Density on the Practice of Inguinal Lymph Node Dissection and Mortality in Patients Diagnosed with Squamous Cell Carcinoma of the Penis. *Annals of Surgical Oncology*. 2018 ;25(1):334-341. doi: 10.1245/s10434-017-6211-x.
28. **Zahnd WE** and McLafferty SL. Contextual Effects and Cancer Outcomes in the United States: A Systematic Review of Characteristics in Multilevel Analyses. *Annals of Epidemiology*. 2017; 27 (11):739-748. DOI: <http://dx.doi.org/10.1016/j.annepidem.2017.10.002>.
27. **Zahnd WE**, James AS, Jenkins WD, Izadi SR, Fogleman AJ, Steward DE, Colditz GA, Brard L. Rural-Urban Differences in Cancer Incidence and Trends in the United States. *Cancer Epidemiology Biomarkers and Prevention*. 2018 Nov;27(11):1265-1274. doi: 10.1158/1055-9965.EPI-17-0430. Epub 2017 Jul 27.
26. Buckley EJ\*, **Zahnd W**, Rea D, Mellinger J, Ganai S. Impact of Rural-Urban Status on Survival After Mastectomy without Reconstruction versus Mastectomy with Reconstruction. *American Journal of Surgery*. 2017 ;214(4):645-650. doi: 10.1016/j.amjsurg.2017.06.014.
25. Dean C, Fogleman AJ, **Zahnd WE**, Lipka AE, Mahli RS, Delfino KR, Jenkins WD. Engaging rural communities in genetic research: challenges and opportunities. *Journal of Community Genetics*. 2017 Jul;8(3):209-219. DOI: 10.1007/s12687-017-0304-x.
24. Mueller-Luckey GS, **Zahnd WE**, Garner K, Heitkamp R, Boehler MD, Jenkins WD, Steward DE. The Mini-Report: A practical tool to address lung cancer disparities in rural communities. *Journal of Cancer Education*. 2017 Jun;32(2):293-300. doi: 10.1007/s13187-015-0921-1.
23. **Zahnd W**, Smith T, Ryherd S, Cleer M, Rogers V, Steward D. Implementing a nutrition and physical activity curriculum in Head Start through an academic-community partnership. *Journal of School Health*. 2017 Jun;87(6):465-473. doi: 10.1111/josh.12515.
22. Javadi P, Sharma A, **Zahnd WE**, Jenkins WD. Evolving disparities in the epidemiology of oral cavity and oropharyngeal cancers. *Cancer Causes & Control*. 2017; 28(6):635-645. doi: 10.1007/s10552-017-0889-8
21. **Zahnd WE**, Mueller-Luckey GS, Ratnapradipa K, Smith T. Predictors and Spatial Variation of Radon Testing in Illinois, 2005-2012. *Journal of Public Health Management and Practice*. 2018 Mar/Apr;24(2):e1-e9. doi: 10.1097/PHH.0000000000000534.
20. Molina YM, Zimmermann K, Carnahan LR, Paulsey E, Bigman-Gilmore C, Khare MM, **Zahnd W**, Jenkins W. Rural women's perceptions about cancer disparities and contributing factors: A call to communication. *Journal of Cancer Education*. 2017 Feb 27. doi: 10.1007/s13187-017-1196-5. [Epub ahead of print].

19. **Zahnd WE**, Jenkins WD, Mueller-Luckey GS. Cancer Mortality in the Mississippi Delta Region: Descriptive Epidemiology and Needed Future Research and Interventions. *Journal of Health Care for the Poor and Underserved*. 2017; 28(1): 315-328. DOI: 10.1353/hpu.2017.0025.
18. **Zahnd WE**, Mueller GS, Fogleman AJ, Jenkins WD. Intrastate variations in rural cancer risk and incidence: an Illinois case study. *Journal of Public Health Management and Practice*. 2016 Sep-Oct;22(5):472-8. doi: 10.1097/PHH.0000000000000310.
17. Clemons J\*, **Zahnd W**, Nutt M\*, Sadowski D\*, Dynda D, Alanee S. Impact of urologist density and county rurality on the practice of retroperitoneal lymph node dissection and cancer specific death in patients with non seminomatous germ cell tumors. *Journal of Adolescent and Young Adult Oncology*. 2017;6(1):83-90. doi: 10.1089/jayao.2016.0028.
16. Jenkins WD, **Zahnd WE**, Spenner A, Wiley C, Roles R, Potini Y\*, Jones L. Comparison of cancer-specific and general health literacy assessments in an educated population: correlations and modifying factors. *Journal of Cancer Education*. 2016 Jun;31(2):268-71. doi: 10.1007/s13187-015-0816-1.
15. Sadowski DJ\*, Geiger SW\*, Mueller GS, **Zahnd WE**, Alanee SR, McVary KT. Kidney Cancer in Rural Illinois: Lower Incidence Yet Higher Mortality. *Urology*. 2016; 94:90-95. doi: 10.1016/j.urology.2016.05.022.
14. Rogers V, Salzeider C, Holzum L\*, Milbrandt T, **Zahnd W**, Puczynski M. Keep Kids in School: A collaborative community effort to increase compliance with state mandated health requirements. *Journal of School Health*. 2016 May. 86 (5):382-385. doi: 10.1111/josh.12389.
13. **Zahnd WE**, Rogers V, Smith T, Ryherd SJ, Botchway A, Steward DE. Gender-specific relationships between socioeconomic disadvantage and obesity in elementary school students. *Preventive Medicine*. 2015; 81:138-141. doi: 10.1016/j.ypmed.2015.08.021.
12. Alanee S, Clemons J\*, **Zahnd W**, Sadowski D\*, Dynda D. Trichloroethylene is associated with kidney cancer mortality: a population-based analysis. *Anticancer Research*. 2015; 35(7):4009-4013.
11. Mueller GS, Clayton AL\*, **Zahnd WE**, Hollenbeck KM\*, Barrow ME\*, Ruez DR, Jenkins WD. Geospatial analysis of cancer risk and residential proximity to coal mines in Illinois. *Ecotoxicology and Environmental Safety*. 2015; 120:155-62. doi: 10.1016/j.ecoenv.2015.05.037.
10. Frye TP\*, Sadowski DJ\*, **Zahnd WE**, Jenkins WD, Dynda DI, Mueller GS, Alanee SR, McVary KT. Impact of county rurality and urologist density on urologic cancer mortality in Illinois. *Journal of Urology*. 2015 May;193(5):1608-14. doi: 10.1016/j.juro.2014.11.100.
9. Jenkins WD, **Zahnd W**, Kovach R, Kissinger P. Chlamydia and Gonorrhea screening in United States emergency departments. *Journal of Emergency Medicine*; 2013; 44 (2):558-567. doi: 10.1016/j.jemermed.2012.08.022.
8. Jenkins WD, Kovach R, Wold BJ, **Zahnd WE**. Using patient provided information to refine sexually transmitted infection screening criteria among women presenting in the emergency department. *Sexually Transmitted Diseases*. 2012; 39(12):965-967. doi: 10.1097/OLQ.0b013e31826e882f
7. Francis ML, Scaife SL, **Zahnd WE**. Rural-urban differences in surgical procedures for Medicare beneficiaries. *Archives of Surgery*. 2011; 146 (5): 579-583. doi: 10.1001/archsurg.2010.306.
6. Francis ML, Varghese JJ\*, Matthew JM\*, Koneru S, Scaife SL, **Zahnd WE**. Outcomes in patients with rheumatoid arthritis and myocardial infarction. *American Journal of Medicine*. 2010; 123 (10):922-928.



5. **Zahnd WE**, Goldfarb J, Scaife SL, Francis ML. Rural-urban differences in behaviors to prevent skin cancer: An analysis of the Health Information National Trends survey. *Journal of the American Academy of Dermatology*. 2010; 62 (6):950-956. doi: 10.1016/j.amjmed.2010.05.017.

4. Varghese JJ\*, Koneru S, Scaife SL, **Zahnd WE**, Francis ML. Mortality after coronary artery revascularization of patients with rheumatoid arthritis. *Journal of Thoracic and Cardiovascular Surgery*. 2010; 140 (1): 91-96. doi: 10.1016/j.jtcvs.2009.09.036.

3. Francis MD, **Zahnd WE**, Varney A, Scaife SL, Francis ML. Effect of number of clinics and panel size on patient continuity for medical residents. *Journal of Graduate Medical Education*. 2009; 1:310-315. doi: 10.4300/JGME-D-09-00017.1

2. Francis ML, Scaife SL, **Zahnd WE**, Cook EF, Schneeweiss S. Joint replacement surgeries among Medicare beneficiaries in rural compared to urban areas. *Arthritis and Rheumatism*. 2009; 60 (12): 3554-3562. doi: 10.1002/art.25004.

1. **Zahnd WE**, Scaife SL, Francis ML. Health literacy skills in rural and urban populations. *American Journal of Health Behavior*. 2009; 33 (5): 550-557.

#### **Editorially-Reviewed Commentaries and Letters to the Editor (Numbered in chronological order; listed in reverse chronological order)**

4. **Zahnd WE**. The COVID-19 Pandemic Illuminates Persistent and Emerging Disparities among Rural Black Populations. *Journal of Rural Health*. <https://doi.org/10.1111/jrh.12460>

3. **Zahnd WE**. Appropriate Considerations of “Rural” in National Cancer Data Base Analyses. *Cancer*. 2019 Dec 10. doi: 10.1002/cncr.32651.

2. Odahowski CL\*, **Zahnd WE**, Eberth JM. Challenges for Lung Cancer Screening in Rural America. *Journal of the American College of Radiology*. 2019; 16(4):590-595.

1. **Zahnd WE**. Consideration of Geographic Context in Breast Cancer in African American Women. *Cancer*. 2016 Jul 1;122(13):2117-8. doi: 10.1002/cncr.30032.

#### **Manuscripts under Review**

Brown MJ, Joseph C\*, James T\*, Haider MR, **Zahnd WE**, Cohen SA. Health Disparities in Social Determinants of Health and Subjective Cognitive Decline: Mediating Role of Depression. *Aging and Mental Health*. Under review.

McDow A, Lanzotti N\*, **Zahnd W**, MacKinney E, Angelos P, Mellinger J, Ganai S. Endocrinology Density Associated with Thyroid Cancer Survival. *American Journal of Surgery*. Under Review.

Adams SA, Babatunde OA, **Zahnd WE**, Hung P, Wickersham KE, Heiney SP, Bhattacharjee PS\*, Eberth JM. An Investigation of Travel Distance and Timeliness of Breast Cancer Treatment Among a Diverse Cohort. *Annals of Epidemiology*. Under Review.

Hung P, Shi K, Probst JC, **Zahnd WE**, Zgodic A\*, Merrell MA, Crouch E, Eberth JM. Trends in cancer treatment service availability across critical access hospitals and prospective payment system hospitals. *Medical Care*. Under Review.

Zgodic A\*, Eberth JM, Smith B, **Zahnd W**, Adams S, McKinley B, Horner R, O'Rourke M, Blackhurst D, Hudson M. Multilevel Predictors of Guideline Concordant Needle Biopsy Use for Non-Metastatic Breast Cancer. *Breast Cancer Research & Treatment*. Under Review.

Petermann V\*, **Zahnd WE**, Vanderpool RC, Eberth JM, Rohweder C, Teal R, Vu M, Stradtman L, Frost E, Trapl E, Gonzalez SK, Vu T, Ko LK, Cole A, Farris PE, Shannon J, Lee J\*, Askelson N, Seegmiller, White A, Edward J, Davis M, Wheeler SB. How Cancer Programs Identify and Address the Financial Burdens of Rural Cancer Patients. *Supportive Care in Cancer*. Under Review.

Murphy C\*, Evans S\*, Askelson N, Eberth JM, **Zahnd WE+**. The extent of inclusion of “rural” in comprehensive cancer control plans. *Preventing Chronic Diseases*. Under Review.

### **Non-Refereed Publications, Reports, Policy Briefs, and Professional Organization Commentaries (Numbered in chronological order; listed in reverse chronological order)**

6. Probst JC, McKinney SH, **Zahnd WE**, Haynes E. Perceived Facilitators and Barriers to Rural Nursing Practice. <https://www.ruralhealthresearch.org/alerts/295> [policy brief]

5. **Zahnd WE** and Ganai S. Access to Cancer Care in Rural Populations: Barriers and Solutions. 2019 April 3. *ASCO Daily News*. <https://dailynews.ascopubs.org/doi/10.1200/ADN.19.190161/full/> [commentary]

4. **Zahnd WE**. Leveraging Cancer Registry Data to Study Breast Cancer Disparities in the Lower Mississippi Delta Region. 2018 September 13. *NAACCR Review*. <https://www.naacr.org/leveraging-cancer-registry-data-to-study-breast-cancer-disparities-in-the-lower-mississippi-delta-region/> [commentary]

3. Heitkamp R, Hamel R, **Zahnd W**. Franklin-Williamson Healthy Communities Coalition Focus Group Results Report. Springfield, IL: Center for Clinical Research, Southern Illinois University School of Medicine; July 2014. [report]

2. **Zahnd WE**, Mueller GS, Garner K, Jenkins WD, Steward DE. Cancer in Rural Illinois, 1990-2010: Incidence, Mortality, Staging, and Access to Care. Springfield, IL: Center for Clinical Research, Southern Illinois University School of Medicine; April 2014. Available at [http://www.siumed.edu/sites/default/files/u1221/cancer\\_in\\_the\\_rural\\_illinois\\_final.pdf](http://www.siumed.edu/sites/default/files/u1221/cancer_in_the_rural_illinois_final.pdf) [report]

1. Jenkins WD, Kovach R, **Zahnd WE**. STD cases still high, with Gonorrhea showing increasing antibiotic resistance. *Emergency Medicine News*. 2011. 33(9) [non-referred publication]

### **Published Abstracts**

#### **(Numbered in chronological order; listed in reverse chronological order)**

26. Lawson AB, Hughes-Halbert C, Babatunde OA, **Zahnd WE**, Eberth JM. Area-level social deprivation and stage at diagnosis among breast cancer patients in South Carolina. *Cancer Epidemiology Biomarkers and Prevention*.2020; 29 (12 Supplement): PO-167-PO-167.

25. Ranganathan R\*, **Zahnd W**, Adams SA. Disproportionate burden of cervical cancer survival by race and rurality in South Carolina, 2001-2016. *Cancer Epidemiology Biomarkers and Prevention*.2020; 29 (12 Supplement): PO-086-PO-086.

24. Ranganathan R\*, **Zahnd W**, Adams SA. Rural urban and racial disparities in colorectal cancer survival among the residents of South Carolina, 2001 – 2016. *Cancer Epidemiology Biomarkers and Prevention*. 2020;29(12 Supplement): PO-122-PO-122.

23. Benavidez GA\*, Zgodic A\*, **Zahnd WE**, Eberth JM. Disparities in Women Being Up to Date With Breast, Cervical, and Colorectal Cancer Screening: An Analysis of 2018 BRFSS Data. *Annals of Epidemiology*. <https://doi.org/10.1016/j.annepidem.2020.08.048>
22. Ranganathan R\*, Adams SA, **Zahnd WE**, Hung P, Brown MJ, Eberth JM. Rural and Racial Disparities in Colorectal Cancer Incidence and Mortality in South Carolina, 1996 – 2016. *Annals of Epidemiology*. <https://doi.org/10.1016/j.annepidem.2020.08.047>
21. Petermann VM\*, Vanderpool RC, Eberth JM, Rohweder C, Teal R, Stradtman L, Frost E, Trapl E, Koopman Gonzalez S, Vu T, Ko L, Cole A, Farris PE, Shannon J, **Zahnd WE**, Lee J. Assessing Cancer Programs' Financial Resources for Rural Cancer Patients. *Journal of Clinical Oncology*. 2019; 37 (27\_suppl): 165-165. DOI: 10.1200/JCO.2019.37.27\_suppl.165.
20. Day J\*, Prakash V, **Zahnd W**, Mahmood M\*, Poola VP, Raknic J, Ganai S. Analysis of County-level Access to Specialized Providers on Colorectal Cancer Incidence and Mortality in Illinois. *Gastroenterology*. 2019; 156 (6):S1434-1435.
19. Taylor S\*, Khan AA\*, **Zahnd W**, Ganai S. Gastrointestinal Cancer Incidence and Trends in United States Rural and Urban Populations. *Gastroenterology*. 2019; 156 (6):S1382.
18. Babatunde O\*, Adams SA, Eberth JM, **Zahnd WE**, Felder TM, Moran R, Hebert JR. A Comparison of Mortality-to-Incidence Ratio with Survival Analyses in Assessing Racial Breast Cancer Disparities Across South Carolina Counties. *Cancer Epidemiology Biomarkers and Prevention*. 2019; 28(3):620.
17. **Zahnd WE**, McLafferty S, Sherman R, Farner S, Klonoff-Cohen H, Rosenblatt K. Spatial accessibility to mammography services in the Lower Mississippi Delta states. *Cancer Epidemiology Biomarkers and Prevention*. 2018; 27 (7 Suppl):C87.
16. Mahmood M\*, **Zahnd WE**, Ganai S. Spatial analysis of radiation oncology access disparities within Illinois: Implications for rural cancer care. *Journal of Clinical Oncology*. 2018; 36: e18644.
15. **Zahnd WE**, Rodriguez C, Jenkins WD. Rural-Urban Differences in Human Papillomavirus-Associated Cancer Trends and Rates. *Annals of Epidemiology*. 2017; 8:508-509.
14. MacKinney E\*, **Zahnd W**, Sturm E\*, Mellinger JD, Ganai S. An Exploration of Regional and Rural-Urban Differences in Pancreas Cancer Surgery. *Gastroenterology*. 2017; 152(5):S1273-S1274.
13. Sturm E\*, **Zahnd W**, MacKinney E\*, Mellinger JD, Ganai S. Rural-Urban and Regional Differences in Receipt of Esophagectomy for Early-Stage Esophagus Cancer. *Gastroenterology*. 2017; 152(5):S1216.
12. Strum EC\*, **Zahnd W**, Mellinger JD, Ganai S. National Trends in Local Excision and Esophagectomy for cT1N0 esophageal cancer. *Journal of Clinical Oncology*. 2017; 34 (4 Suppl): 62.
11. **Zahnd W**, McQueen A, Lobb R, Diaz-Sylvester P, Brard L. Rural-urban and access to care differences in cervical cancer stage at diagnosis. *Cancer Epidemiology Biomarkers and Prevention*. 2017; 26 (2 Suppl): C45.
10. Canopy E\*, **Zahnd W**, Breslin TM, Rea DJ, Mellinger JD, Ganai S. National Trends of the Impact of Rurality on Breast Cancer Surgery. *Annals of Surgical Oncology*. 2016; 23: S58-S59.

9. Regan J\*, **Zahnd W**, Kistner B\*, Ali A, Mellinger JD, Ganai S. Rural Disparities in Esophageal Cancer Outcomes Based on Distance From Endoscopic Ultrasound (EUS)-Trained Gastroenterologists. *Gastroenterology*. 148(4): S-1157.
8. Sadowski D\*, Frye T\*, Alanee S, **Zahnd W**, Jenkins W, Dynda D, Mueller G, McVary K. Impact of County Rurality and Urologist Density on Urologic Cancer Mortality in Illinois. *The Journal of Urology*. 2015; 193 (4): e104.
7. Kistner B\*, **Zahnd W**, Ali A, Mellinger JD, Ganai S. Exploration of rural disparities in pancreatic cancer staging and mortality to incidence ratio in Illinois. *Annals of Surgical Oncology*. 2015; 22(S1): S159.
6. Kistner B\*, **Zahnd W**, Ali A, Mellinger JD, Ganai S. Exploration of rural disparities in pancreatic cancer staging and mortality to incidence ratio in Illinois. *Journal of Clinical Oncology*. 2015; 33 (3)Suppl: 260.
5. Mueller G, **Zahnd W**, Garner K, Heitkamp R, Jenkins W, Boehler M, Land D, Steward D. The "Mini-Report": Use of CBPR to create a practical tool to address lung cancer disparities in rural communities. *Cancer Epidemiology Biomarkers and Prevention*. 2014; 23(11)Suppl: A40.
4. **Zahnd W**, Steward D, Jenkins W, Andoh J, Mueller G, Puczynski S. Barriers to completion of a free colorectal cancer screening program in a low-income population. *Cancer Epidemiology Biomarkers and Prevention*. 2014; 23 (11)Suppl: B95.
3. Rethnam R, Henke JQ, Hopkins-Price P, Scaife S, **Zahnd WE**, Francis ML. Survival Benefit with pulmonary artery catheter placement in patients with combined sepsis and congestive heart failure compared to patients with only sepsis or congestive heart failure. *Critical Care Medicine*. 2008; 36 (12):A160.
2. Varghese JJ\*, Koneru S, Scaife SL, **Zahnd W**, Rumman S, Francis ML. Clinical implications of the choice of therapy for patients with rheumatoid arthritis and lupus after acute myocardial infarction. *Journal of the American College of Cardiology*. 2008; 51 (10): B62.
1. Varghese JJ\*, Koneru S, Scaife SL, **Zahnd W**, Francis ML. Improved in-hospital mortality of rheumatoid arthritis patients undergoing coronary revascularization procedures: Rheumatoid arthritis paradox. *Journal of the American College of Cardiology*. 2008; 51 (10): A260.

## RESEARCH SUPPORT

### Current

Rural Health Research Grant Program Cooperative Agreement

Project 1: Assessing cancer care coordination in Rural Health Clinics during a pandemic

Project 2: Availability of Physical Health Infrastructure in Areas with a High Proportion of Historically Disadvantaged Minority Residents

Source: Federal Office of Rural Health Policy/National Cancer Institute

Period: 09/2020-08/2021

Role: Co-Principal Investigator (Project 1); Co-Investigator (Project 2)

Total Costs; \$700,000

The MISSION Act's impact on rural veteran access to and experience of care: views of rural Veterans and non-VA primary care clinics PLUS VA clinics and community service organizations

Source: Veterans Rural Health Resource Center-Oregon (Oregon Health & Science University)

Period:08/2020-06/2021

Role: Subcontract PI

Total Costs of Subcontract: \$10,000

A Spatial Approach to Evaluating Potential and Realized Access to Broadband Services--A "Super-Determinant of Health"

Source: University of South Carolina Big Data Health Science Center Pilot Program  
Period: 08/2020-12/2021  
Role: Principal Investigator  
Total Costs: \$32,631

An Investigation of Racial and Geospatial Disparities in the Utilization, Adherence, and Economic Cost to Targeted Therapies for Breast Cancer

Source: University of South Carolina Big Data Health Science Center Pilot Program  
Period: 08/2020-6/2022  
Role: Co-Investigator  
Total Costs: \$47,500

Racial/Ethnic, Geographic, and Socioeconomic Disparities in Molecular Testing among Breast Cancer Patients

Source: American Cancer Society Institutional Research Grant  
Period: 06/2020-05/2021  
Role: Principal Investigator  
Total Costs: \$20,000

Big Data Health Science Center Geospatial Core

Source: USC Office of the Vice President of Research/Provost Office (Excellence Initiative Project)  
Period: 05/2020-08/2021  
Role: Geospatial Core Co-Director

Planning for Implementation of Evidence-Based Cancer Screening Practices in Rural Health Clinics

Source: South Carolina Center for Rural and Primary Care Rural Innovations Cooperative Agreement Program  
Period: 09/2019-08/2021  
Role: Co-Investigator  
Total Costs: \$198,000

Rural Health Information Hub Supplement

Source: University of North Dakota Subcontract  
Period: 03/2021-05/2021 (Funded: 4/2021-5/2021)  
Role: Co-Investigator

### **Pending**

Geospatial Approaches to Identify Multilevel Determinants for Disparities in Patient-Reported Outcomes and Survival in Head and Neck Cancers

Source: National Cancer Institute (R01)  
Period: 09/2021-08/2026  
Role: Co-Investigator (12.5% FTE)

The effect of rurality and the COVID-19 pandemic on telemedicine and preventive healthcare use

Source: Agency for Healthcare Research and Quality (K01)  
Period: 09/2021-08/2026  
Role: Expert Advisor (In Kind)

## Completed

Rural Health Research Grant Program Cooperative Agreement

Project 1: Rural-Urban Cancer Disparities and Cancer Prevention and Control Activities in Rural Healthcare Settings

Project 2: Development and Pilot Testing of Cancer Prevention and Control Interventions in Rural Health Clinics

Source: Federal Office of Rural Health Policy Rural Health Research Grant Program

Cooperative Agreement

Period: 09/2019-08/2020

Role: Co-Investigator (Both Projects)

Total Costs: \$545,370

Rural Health Research Grant Program Cooperative Agreement

Project: Rural Colon and Cervical Cancer (RCCC) Environmental Scan

Source: Federal Office of Rural Health Policy

Period: 09/2018-08/2019

Role: Post-Doctoral Researcher

Ending Transmission of HIV, HCV, and STDs and Overdose in Rural Communities of People who Inject Drugs (ETHIC)

Source: National Institute of Health (1UG3DA044829-01)

Period: 08/2017-07/2018

Role: Co-Investigator

Spatial Analysis of Radon Testing and Mitigation in Illinois: A Public Health Perspective

Source: Environmental Protection Agency State Indoor Radon Grant

Period: 07/2015-09/2018

Role: Co-Investigator

Spatial Analysis of Rural Disparities in Staging and Oncologic Outcomes for Esophageal and Pancreas Cancer

Source: Society for Surgery of the Alimentary Tract Health Disparities Award

Period: 07/2015-06/2017

Role: Data Manager and Analyst

Illinois Comprehensive Cancer Control Plan 2016

Source: Illinois Department of Public Health

Period: 02/2016-12/2016

Role: Program Manager

Community Health Needs Assessment Secondary Data Reports for 5 Hospital Sisters Health System (HS) Hospitals

Source: Hospital Sisters Health System

Period: 09/2014-06/2015

Role: Project Manager

Geospatial Analysis of Potential Environmental Causes of Cancer in Illinois

Source: Caryl Towsley Moy, PhD, Endowed Fund for Collaborative Research

Period: 02/2014-01/2015

Role: Data Manager and Analyst

Proposal to characterize cancer patient and family member health literacy and identify communication modifications and complementary strategies

Source: Memorial Medical Center Foundation

Period: 02/2013-01/2014  
Role: Data Manager

Central Illinois Colorectal Cancer Screening Research Initiative  
Source: American Cancer Society, Illinois Division  
Period: 08/2012-07/2014  
Role: Data Manager

Collaboration to Reduce Lung Cancer Disparities in the Southern Illinois Delta Region  
Source: American Cancer Society, Illinois Division  
Period: 07/2012-06/2014  
Role: Project Manager

Community Engagement and Medical Student Education for Child Health Promotion  
Source: Portes Foundation  
Period: 07/2012-06/2013  
Role: Data Manager

Effectiveness of Screening ED Patients for Genital and Oropharyngeal Chlamydial and Gonorrheal Infections  
Source: Memorial Medical Center Foundation  
Period: 02/2012-01/2013  
Role: Data Manager

Adams County Children's Mental Health Partnership  
Source: Illinois Children's Healthcare Foundation  
Period: 09/2011-5/2014  
Role: Data Manager

Springfield Collaborative for Active Child Health  
Source: Blue Cross Blue Shield of Illinois Healthy Kids, Healthy Families Grant  
Period: 07/2011-06/2015  
Role: Data Manager and Analyst

Feminine Hygiene Practices, Bacterial Vaginosis, and Sexually Transmitted Infections in US Women  
Source: Arnold O. Beckman Award  
Period: 05/2006-05/2007  
Role: Graduate Research Assistant

## **CONFERENCES AND SYMPOSIA**

### **Conference Abstract Presentations**

**(Numbered in chronological order; listed in reverse chronological order)**

**\*Indicates student or medical resident presenter**

104. **Zahnd W**, Larson A, Bell N. Rural-Urban and Sociodemographic Disparities in Broadband Access. National Rural Health Association Annual Conference. 2021 May 5-7. [accepted presentation].

103. **Zahnd W**, Eberth J, Evans D. Addressing Rural Disparities in Comprehensive Cancer Control Plans. National Rural Health Association Health Equity Conference. 2021 May 4. [accepted panel session].

102. **Zahnd W**, Hung P, Eberth J. Cancer Care Delivery in Rural Safety Net Settings. National Rural Health Association Annual Conference. 2021 May 5-7. [accepted panel session].

101. Shi K, Hung P, **Zahnd W**, Zgodic A\*, Merrell MA, Crouch E, Probst JC, Eberth JM. Changes in Spatial Distributions of Cancer Prevention and Treatment Services in Rural America: the Role of Hospital Closures. National Big Data Health Science Center Conference. 2021 February 5-6. [virtual poster]
100. Ranganathan R\*, **Zahnd WE**, Harrison SE, Brandt HM, Adams SA, Eberth JM. Application of Spatial Methods to Examine Spatial Access to Vaccine for Children Providers in South Carolina. National Big Data Health Science Center Conference. 2021 February 5-6. [virtual poster]
99. Ranganathan R\*, Babatunde O, Adams SA, **Zahnd WE**. Disparities In Molecular Testing Among Female Breast Cancer Patients. American Society of Preventive Oncology 45<sup>th</sup> Annual Meeting. 2021 March 29-April 1. [virtual abstract].
98. Babatunde O, **Zahnd W**, Eberth JM, Lawson AB, Hughes Halbert C. Area-Level Social Deprivation and Stage at Diagnosis among Breast Cancer Patients in South Carolina. 13<sup>th</sup> AACR Conference on the Science of Cancer Health Disparities in Racial/Ethnic Minorities and the Medically Underserved. 2020 October 2-4 [virtual poster]
97. Ranganathan R\*, **Zahnd W**, Adams S. Rural Urban and Racial Disparities in Colorectal Cancer Survival Among Residents Of South Carolina, 2001-2016. 13<sup>th</sup> AACR Conference on the Science of Cancer Health Disparities in Racial/Ethnic Minorities and the Medically Underserved. 2020 October 2-4. [virtual poster]
96. Ranganathan R\*, **Zahnd W**, Adams S. Disproportionate Burden Of Cervical Cancer Survival By Race And Rurality In South Carolina, 2001 – 2016. 13<sup>th</sup> AACR Conference on the Science of Cancer Health Disparities in Racial/Ethnic Minorities and the Medically Underserved. 2020 October 2-4 [virtual poster]
95. Zgodic A\*, **Zahnd W**, Studts J, Miller D, Eberth J. Adjustment of complex survey design weights for multilevel modeling: An application using optional BRFSS modules on lung cancer screening. American Public Health Association Annual Meeting and Expo. 2020 October 24-28. [virtual oral presentation].
94. Ranganathan R\*, Adams SA, **Zahnd WE**, Hung P, Brown M, Eberth JM. Disparities in Colorectal Cancer in South Carolina, 1996-2016. American College of Epidemiology 2020 Virtual Conference. 2020 September 21-23. [virtual poster]
93. Benavidez G\*, Zgodic A\*, **Zahnd W**, Eberth JM. Disparities in cancer screening among women in the United States. American College of Epidemiology 2020 Virtual Conference. 2020 September 21-23 [virtual poster].
92. Hung P, **Zahnd W**, Deng S\*, Wang S, Eberth J. Disparities in Access to Cancer Care Facilities and Colorectal Cancer Care Outcomes in South Carolina. 2020 Academy Health Annual Research Meeting. [virtual poster]
91. Hung P, **Zahnd W**, Brandt H, Adams S, Wang S, Eberth J. Cervical Cancer Treatment Initiation and Survival: the Role of Residential Proximity to Cancer Care. 2020 Academy Health Annual Research Meeting. [virtual poster]
90. **Zahnd W**, Crouch E, Hung P, Eberth J. Rural Minority Disparities across the Life Span. 2020 National Rural Health Association Health Equity Conference. Plenary session presented virtually due to COVID-19
89. Zgodic A\*, Eberth JM, **Zahnd WE**, Adams SA, Hudson MF. Impact of Patient Metropolitan Status and Facility Region on Disparities in Needle Biopsy Receipt for Breast Cancer Diagnosis. 2020 National Rural Health Association Health Equity Conference. Poster presented virtually due to COVID-19
88. Zgodic A\*, Benavidez GA\*, **Zahnd WE**, Eberth JM. Factors Associated with Lung Cancer Screening in Urban vs. Rural Individuals at Risk for Lung Cancer. National Rural Health Association Health Equity Conference. Presentation presented virtually due to COVID-19.



87. Benavidez GA\*, Zgodic A\*, **Zahnd WE**, Eberth JM. Sociodemographic Factors Associated with Mammography in The United States. National Rural Health Association Annual Conference. [accepted poster]
86. Benavidez GA\*, Zgodic\* A, **Zahnd,WE**, Eberth JM. Disparities in Cervical Cancer Screening in The United States. 3rd Annual NCI Symposium on Cancer Health Disparities. 16-17 April 2020. Bethesda, MD. [accepted oral presentation—conference postponed due to COVID-19]
85. **Zahnd WE**, Petermann V\*, Teal R, Vu M, Vanderpool RC, Rohweder C, Askelson N, Edward JE, Farris PE, Koopman Gonzalez SJ, Ko LK, Eberth JM, Cancer Prevention and Control Research Network Rural Cancer Workgroup. Interventions to Address the Financial Burden of Cancer Care: Recommendations from the Field. American Society of Preventive Oncology 44th Annual Meeting. 22-24 March 2020. [poster-presented via Twitter as conference was virtual due to COVID-19].
84. **Zahnd WE**, Petermann V\*, Teal R, Vu M, Vanderpool RC, Rohweder C, Farris PE, Askelson N, Stradtman L, Koopman Gonzalez SJ, Vu T, Eberth JM, Cancer Prevention and Control Research Network Rural Cancer Workgroup. Financial Navigation Staff Perspectives on the Patients' Financial Burden of Cancer Care. American Society of Preventive Oncology 44th Annual Meeting. 22-24 March 2020. Tucson, AZ [online only abstract].
83. **Zahnd WE**, Gomez SL, Steck SE, Brown MJ, Ganai S, Zhang J, Adams SA, Berger F, Eberth JM. Joint Rural-Urban and Racial/Ethnic Disparities in Early-Onset Colorectal Cancer Incidence and Trends. 44th Annual American Society of Preventive Oncology conference. March 22-24, 2020. Tucson, AZ [online only abstract]
82. Benavidez G\*, Zgodic A\*, **Zahnd W**, Eberth JM. Demographics of Breast Cancer Screening in South Carolina. 13<sup>th</sup> Annual Carolina Women's Health Forum. 5 March 2020. Columbia, SC [poster].
81. **Zahnd WE**, Josey MJ, Schootman M, Eberth JM. Using Two-Step Floating Catchment Area Methods to Evaluate Spatial Accessibility to Colonoscopy and Their Ability to Predict Late-Stage Colorectal Cancer. 2020 Big Data Health Science Center Conference. 8-11 February 2020. Columbia, SC [poster].
80. Brown MJ, Patterson RC\*, Haider MR, **Zahnd W**, Cohen SA. Social determinants of health matter: Association with cognition and disparities by sex and race/ethnicity in the Deep South. American Public Health Association Annual Meeting. 2-6 November 2019. Philadelphia, PA [poster]
79. Petermann VM\*, Vanderpool RC, Eberth JM, Rohweder C, Teal R, Stradtman L, Frost E, Trapl E, Koopman Gonzalez S, Vu T, Ko L, Cole A, Farris PE, Shannon J, **Zahnd WE**, Lee J\*. Assessing Cancer Programs' Financial Resources for Rural Cancer Patients. American Society of Clinical Oncology Quality Care Symposium. 6-7 September 2019. San Diego, CA. [poster]
78. Day J\*, Prakesh V, **Zahnd W**, Mahmood M\*, Poola VP, Rakinic J, Ganai S. Analysis of County-level Access to Specialized Providers on Colorectal Cancer Incidence and Mortality in Illinois. Digestive Disease Week. 19-21 May 2019. San Diego, CA. [poster]
77. Taylor S\*, **Zahnd W**, Ganai S. Gastrointestinal Cancer Incidence and Trends in United States Rural And Urban Populations. Digestive Disease Week. 19-21 May 2019. San Diego, CA. [oral presentation]
76. Hung P, Deng S\*, **Zahnd W**, Adams S, Olatosi B, Crouch E, Eberth J. Urban-rural disparities in access to colorectal and cervical cancer care specialists. National Rural Health Association Conference. 8-10 May 2019. Atlanta, GA. [poster]
75. Biesecker C\*, **Zahnd W**, Adams S, Eberth JM. Mapping Cervical Cancer Access and Prevention in SC. National Rural Health Association Health Equity Conference. 7 May 2019. Atlanta, GA [poster]

74. Probst JC, Breneman C, **Zahnd W**. Rural-Urban Trends in Infant and Youth Mortality. 42<sup>nd</sup> Annual National Rural Health Association Conference. 8-10 May 2019. Atlanta, GA. [oral presentation]
73. **Zahnd W**, Davis M, Rotter JS\*, Vanderpool RC, Perry CK, Shannon J, Ko LK, Wheeler SB, Odahowski CL\*, Farris PE, Eberth JM. Financial Problems among Rural and Urban Cancer Survivors. 42<sup>nd</sup> Annual National Rural Health Association Conference. 8-10 May 2019. Atlanta, GA. [poster]
72. Probst JC, Hunt McKinney S, Outeen S, **Zahnd W**, Haynes E. Educational gaps a barrier to rural nursing practice. 42<sup>nd</sup> Annual National Rural Health Association Conference. 8-10 May 2019. Atlanta, GA. [poster]
71. Brandt H, Eberth J, **Zahnd W**. Cancer Prevention and Control Research in Rural Populations. 42<sup>nd</sup> Annual National Rural Health Association Conference. 8-10 May 2019. Atlanta, GA. [panel presentation]
70. Biesecker C\*, **Zahnd WE**, Adams SA, Eberth JM. Mapping Cervical Cancer Access and Prevention in SC. Discover USC, 26 April 2019. Columbia, SC. [poster]
69. Lee J\*, **Zahnd WE**, Eberth JM. Financial Toxicity Among Rural Cancer Patients in South Carolina. Discover USC, 26 April 2019. Columbia, SC. [poster]
68. Zgodic A\*, **Zahnd WE**, Eberth JM. Evaluating disparities in lung cancer screening uptake using the Behavioral Risk Factor Surveillance System. Discover USC, 26 April 2019. Columbia, SC. [poster]
67. Biesecker C\*, **Zahnd WE**, Adams SA, Eberth JM. Mapping Cervical Cancer Access and Prevention in SC. Clyburn Health Disparities Lecture, 23 April 2019. Columbia, SC. [poster]
66. Odahowski C\*, **Zahnd W**, Davis M, Perry C, Vanderpool R. Financial Hardship among Rural Cancer Survivors in the U.S. 43<sup>rd</sup> Annual American Society of Preventive Oncology Conference. 10-12 March 2019. Tampa, FL. [poster]
65. Babatunde O\*, Adams SA, Eberth JM, **Zahnd WE**, Felder TM, Moran R, Hebert JR. A comparison of Mortality-to-Incidence ratio with survival analyses in assessing racial breast cancer disparities across South Carolina Counties. 43<sup>rd</sup> Annual American Society of Preventive Oncology Conference. 10-12 March 2019. Tampa, FL. [oral presentation]
64. Eberth JM, Odahowski CL\*, **Zahnd WE**. Geographic Disparities in Lung Cancer Screening in the U.S. 43<sup>rd</sup> Annual American Society of Preventive Oncology Conference. 10-12 March 2019. Tampa, FL. [poster]
63. Eberth JM, **Zahnd WE**, Josey MJ\*, Schootman M, Probst JC. Temporal Trends in Spatial Access to Colonoscopy in South Carolina. 43<sup>rd</sup> Annual American Society of Preventive Oncology Conference. 10-12 March 2019. Tampa, FL. [online only abstract]
62. Deshpande M, **Zahnd W**, Bandy L\*, Lorenson J\*, Fifer A. Spatial analysis of disparities in asthma treatment among adult asthmatics. American Pharmacists Association Annual Meeting. 22-25 March 2019. Seattle, WA [poster]
61. Taylor S\*, **Zahnd WE**, Ganai S. Rural-urban and racial/ethnic disparities in hepatocellular carcinoma incidence. 14<sup>th</sup> Annual Academic Surgical Congress. 5-7 February 2019. Houston, TX. [oral presentation]
60. Day J\*, **Zahnd WE**, Poola P, Rakinic J, Ganai S. Spatial Accessibility to Colorectal Cancer Care in the State of Illinois. 14<sup>th</sup> Annual Academic Surgical Congress. 5-7 February 2019. Houston, TX. [oral presentation]

59. **Zahnd W**, Thomas A, Crawford C, Capizzi, Jenkins W, Pho M. Utilization of Spatial Methods to Address the Rural Opioid Syndemic in a multi-site study. 2018 Addiction Health Services Research Conference. 17-19 October 2018. Savannah, GA. [panel]
58. Ellis K\*, McLuckie C\*, Navon L, Walblay K, Rodriguez C, Jenkins WD, Pho MT, **Zahnd WE**. Mapping the availability of opioid-related resources provided by local health departments. Illinois Public Health Association 77<sup>th</sup> Annual Conference. 5-7 September 2018. Normal, IL. [poster]
57. Eberth JM, Crouch E, Josey MJ\*, **Zahnd W**, Adams SA, Stiles B, Schootman M. Rural-urban differences in access to thoracic surgery in the United States, 2010-2014. Accelerating Rural Cancer Control Research Meeting. 30-31 May 2018. Bethesda, MD. [poster]
56. **Zahnd WE** and Eberth JM. A Conceptual Model for Multilevel Analysis in Rural Cancer Control. Accelerating Rural Cancer Control Research Meeting. 30-31 May 2018. Bethesda, MD. [poster]
55. Mahmood M\*, **Zahnd WE**, Ganai S. Spatial analysis of radiation oncology access disparities within Illinois: implications for rural cancer care. 2018 American Society of Clinical Oncology Annual Meeting. 1-5 June 2018. Chicago, IL. [online only abstract]
54. Rossi M\*, Buckley EJ\*, **Zahnd W**, Ganai S. Rural-Urban Differences in Time to Radiation among Breast Conserving Surgery Patients. 19<sup>th</sup> Annual Meeting of the American Society of Breast Surgeons. 2018 May 2-6. Orlando, FL. [poster]
53. Rossi M\*, Buckley EJ\*, **Zahnd W**, Ganai S. Rural-Urban Differences in Time to Radiation among Breast Conserving Surgery Patients. Illinois Chapter of the American College of Surgeons. 2018 April 29. Chicago, IL. [oral]
52. Jenkins WD, Watson K, **Zahnd W**, Matthews A, Bailey A, Patera J. Examining the Role of Dissemination and Implementation Science to Improve Lung Cancer Screening in Rural Communities. American Public Health Association 2017 Annual Meeting and Expo. 2017 November 4. Atlanta, GA. [poster]
51. **Zahnd W**, McLafferty S, Sherman R, Farmer S, Klonoff-Cohen H, Rosenblatt K. Spatial Accessibility to Mammography Services in the Lower Mississippi Delta States. Tenth AACR Conference on the Science of Cancer Health Disparities in Racial/Ethnic Minorities and the Medically Underserved. 2017 September 25-28. Atlanta, GA. [poster]
50. **Zahnd WE**, Rodriguez C, Jenkins WD. Rural-urban differences in human papillomavirus-associated cancer: rates and trends. 2017 Annual Meeting of the American College of Epidemiology. 2017 September 24-28. New Orleans, LA. [poster]
49. Lawrence L\*, **Zahnd W**, Sharma A, Javadi P. Laryngeal cancer trends and the Affordable Care Act. American Academy of Otolaryngology-Head and Neck Surgery Foundation Annual Meeting. 2017 September 10-13. Chicago, IL. [oral]
48. **Zahnd W**, James A, Jenkins W, Colditz G, Steward D, Brard L. Cancer Incidence and Trends in Rural and Urban Populations in the United States. North American Association of Central Cancer Registries Annual Conference. 2017 June 16-23. Albuquerque, NM. [oral]
47. **Zahnd W**, Mueller-Luckey G, Sarver J. Utilization of ACS and Other Federal Data to Address Health Disparities in a Federally Designated Region. 2017 American Community Survey Data Users Conference. 2017 May 11-12. Arlington, VA. [oral]

46. Sturm E\*, **Zahnd WE**, MacKinney E\*, Mellinger JD, Ganai S. Rural-Urban and Regional Differences in Receipt of Esophagectomy for Early-Stage Esophagus Cancer. Digestive Disease Week. 2017 May 6-9. Chicago, IL. [oral]
45. MacKinney E\*, **Zahnd WE**, Sturm EC\*, Mellinger JD, Ganai S. An Exploration of Regional and Rural-Urban Differences in Pancreas Cancer Surgery. Digestive Disease Week. 2017 May 6-9. Chicago, IL. [poster]
44. Jenkins WD, **Zahnd WE**, Fogleman AJ, Mueller-Luckey GS. Rural Measures and Cancer Disparities Studies: Elucidating Intra-Rural Differences and Future Avenues for Research. Rural Cancer Control: Challenges & Opportunities Research Meeting. 2017 May 4-5. Memphis, TN. [poster]
43. Brard L, Hyon KS\*, Izadi SR, Diaz-Sylvester P, **Zahnd WE**, Colditz GA. Rural-Urban Variation in Surgical Treatment, Lymph Node Examination, and Adequate Lymphadenectomy for Endometrial Cancer Patients. Rural Cancer Control: Challenges & Opportunities Research Meeting. 2017 May 4-5. Memphis, TN. [poster]
42. Osiecki KM, Jenkins W, Mueller-Luckey G, **Zahnd W**, Crumly D, Fogleman A, Rodriguez C. Rural Environmental and Health Disparity Measures: Are rural areas inaccurately portrayed and under represented by current indices? Population Association of America 2017 Annual Meeting. 2017 April 27-29. Chicago, IL. [poster]
41. Buckley EJ\*, **Zahnd W**, Rea D, Mellinger JD, Ganai S. Impact of Time to Surgery on Rural-Urban Disparities in Breast Cancer. Society for Surgical Oncology Annual Cancer Symposium. 2017 March 15-17. Seattle, WA. [poster]
40. Buckley EJ\*, **Zahnd W**, Rea D, Mellinger JD, Ganai S. Impact of Rural-Urban Status on Survival after Mastectomy without Reconstruction versus Mastectomy with Reconstruction. American Society of Breast Surgeons, 18th Annual Meeting. 2017 April 26-30. Las Vegas, NV.[poster]
39. Lanzotti NJ\*, **Zahnd WE**, Tseng JF, Mellinger JD, Ganai S. Impact of Travel Distance on Survival from Early-Stage Breast and Pancreas Cancer. 12th Annual Academic Surgical Congress. 2017 February 7-9. Las Vegas, NV. [oral]
38. McDow A\*, **Zahnd WE**, Angelos P, Lanzotti N\*, Mellinger JD, Ganai S. Impact of Endocrinologist and Surgeon Density on Thyroid Cancer Survival. 12th Annual Academic Surgical Congress. 2017 February 7-9. Las Vegas, NV. [oral]
37. Sturm EC\*, **Zahnd WE**, Mellinger JD, Ganai S. National Trends in Surgical Decision-Making for Early-Stage Esophageal Cancer. 12th Annual Academic Surgical Congress. 2017 February 7-9. Las Vegas, NV. [oral]
36. Sturm EC\*, **Zahnd WE**, Mellinger JD, Ganai S. National Trends in Local Excision and Esophagectomy for c1TN0 Esophageal Cancer. 2017 Gastrointestinal Cancers Symposium. 2017 January 19-21. San Francisco, CA. [poster]
35. Javadi P, Sharma A, **Zahnd W**, Jenkins WD. Disparities in the epidemiology of oral cavity and pharyngeal cancers. American Public Health Association Annual Meeting and Exposition. 2016 October 29-November 2. Denver, CO. [poster]
34. **Zahnd W**, McQueen A, Lobb R, Diaz-Sylvester P, Brard L. Rural-Urban and Access to Care Differences in Cervical Cancer Stage at Diagnosis. Ninth AACR Conference on The Science of Cancer Health Disparities in Racial/Ethnic Minorities and the Medically Underserved. 2016 September 25-28. Ft. Lauderdale, FL. [poster]
33. **Zahnd WE**, Mueller-Luckey GS, Ratnapradipa K, Smith T. Predictors and Spatial Hotspots of Licensed and Home Kit Radon Testing in Illinois, 2005-2012. 30th Annual International Radon Symposium. 2016 September 18-21. San Diego, CA. [oral]

32. Alanee S, Cheema A\*, **Zahnd W**, Dynda D. The impact of insurance status on performance of retroperitoneal lymph node dissection and cancer specific death in patients with non seminomatous germ cell tumors. American Society for Clinical Oncology Annual Meeting. 2016 June 3-7. Chicago, IL. [poster]
31. Alanee S, Clemons J\*, **Zahnd W**, Dynda D. Impact of urologist density and county rurality on the practice of retroperitoneal lymph node dissection and cancer specific death in patients with non seminomatous germ cell tumors. American Society for Clinical Oncology Annual Meeting. 2016 June 3-7. Chicago, IL. [poster]
30. Canopy E\*, **Zahnd W**, Breslin TM, Rea DJ, Mellinger JD, Ganai S. National Trends of the Impact of Rurality on Breast Cancer Surgery. 66th Annual Scientific Meeting of the Illinois Chapter of the American College of Surgeons. 2016 May 18-20. Springfield, IL. [oral]
29. McDow A\*, **Zahnd W**, Angelos P, Mellinger JD, Ganai S. Impact of Rurality on National Trends in Thyroid Cancer Incidence and Long-term Survival. The American Association of Endocrine Surgeons 37<sup>th</sup> Annual Meeting. 2016 April 10-12; Baltimore, MD. [poster]
28. Canopy E\*, **Zahnd W**, Breslin T, Rea D, Mellinger JD, Ganai S. National Trends of the Impact of Rurality on Breast Cancer Surgery. Society for Surgical Oncology Annual Cancer Symposium. 2016 March 2-5; Boston, MA. [poster]
27. Sadowski D\*, Geiger S\*, Mueller G, **Zahnd W**, Alanee S, McVary K. Kidney cancer in rural Illinois: lower incidence yet higher mortality. 16<sup>th</sup> Annual Meeting of the Society of Urologic Oncology. 2015 December 2-4; Washington, DC. [poster]
26. Alanee S, Clemons J\*, **Zahnd W**, Sadowski D, Dynda D. Trichloroethylene is associated with kidney cancer mortality: a population-based analysis. 16<sup>th</sup> Annual Meeting of the Society of Urologic Oncology. 2015 December 2-4; Washington, DC. [poster]
25. Sadowski D\*, Mueller G, **Zahnd W**, Alanee S, McVary K. Investigating the etiology of kidney cancer disparities in Illinois. 89th Annual Meeting of the North Central Section of the American Urological Association. 2015 November 10-14. Amelia Island, FL. [oral]
24. Canopy E\*, **Zahnd W**, Breslin TM, Rea DJ, Mellinger JD, Ganai S. National Trends of the Impact of Rurality on Breast Cancer Surgery. Simmons Cancer Institute at SIU Research Symposium: The Biology and Treatment of Cancers in the Reproductive System. 2015 November 7. Springfield, IL. [poster]
23. **Zahnd W**, Rogers V, Steward D, Smith T, Treadwell D. Gender differences in the effect of socioeconomic disadvantage on overweight/obesity in elementary students. American Public Health Association Annual Meeting and Exposition. 2015 October 31-November 4; Chicago, IL. [poster]
22. Mueller G, Clayton A\*, **Zahnd W**, Hollenbeck K\*, Barrow M\*, Ruez Jr D, Jenkins WD. Proximity to coal mining activity and cancer risk in Illinois: A geospatial approach. American Public Health Association Annual Meeting and Exposition. 2015 October 31-November 4. Chicago, IL. [oral]
21. **Zahnd WE** and Mueller GS. Identified Lung Cancer Risks in Rural Illinois: Recent Research and Health Implications. 2015 Illinois Rural Health Association Meeting. 2015 August 13-15. East Peoria, IL. [oral]
20. Regan J\*, **Zahnd W**, Kistner B\*, Ali A, Mellinger JD, Ganai S. Rural Disparities in Esophageal Cancer Outcomes based on Distance from Endoscopic Ultrasound (EUS)-Trained Gastroenterologists. Illinois Chapter of the American College of Surgeons. 2015 June 18-20. Peoria, IL. [oral]

19. Sadowski D\*, Frye T\*, Alanee S, **Zahnd W**, Jenkins W, Dynda D, Mueller G, McVary K. Impact of county rurality and urologist density on urologic cancer mortality in Illinois. American Urologic Association's 2015 Annual Meeting, 2015 May 15-19; New Orleans, LA. [poster]
18. Regan J\*, **Zahnd W**, Kistner B\*, Ali A, Mellinger JD, Ganai S. Rural disparities in esophageal cancer outcomes based on distance from Endoscopic Ultrasound (EUS)-Trained gastroenterologists. Digestive Disease Week. 2015 May 16-19; Washington D.C. [poster]
17. **Zahnd W**, Kistner B\*, Ali A, Mellinger JD, Ganai S. The impact of rurality and access to gastroenterologists on disparities in pancreas cancer staging and mortality. The Pancreas Club 49th annual meeting, 2015 Digestive Disease Week. 2015 May 15-16. Washington DC. [oral]
16. Kistner B\*, **Zahnd W**, Ali A, Mellinger JD, Ganai S. Exploration of rural disparities in pancreas cancer staging and mortality to incidence ratio in Illinois. Society for Surgical Oncology Annual Cancer Symposium. 2015 March 25-28; Houston, TX. [poster]
15. Morgenstern K\*, Smith T, **Zahnd W**, Steward D. The Springfield Collaborative for Active Child Health: the development of a student-centered predictive health model for at-risk schools. Association for Prevention Teaching and Research Annual Meeting. 2015 March 15-17; Charleston, SC. [poster]
14. Kistner B\*, **Zahnd W**, Ali A, Mellinger JD, Ganai S. Exploration of rural disparities in pancreas cancer staging and mortality to incidence ratio in Illinois. 2015 Gastrointestinal Cancers Symposium. 2015 January 15-17; San Francisco, CA. [poster]
13. Heitkamp M, Newberry M, Sanders K, Land D, **Zahnd W**, Hamel R\*, Ryherd S, Puczynski S, Steward D, Jenkins W. Using CBPR principles in focus groups to address lung cancer disparities in rural southern Illinois. American Public Health Association Annual Meeting and Exposition. 2014 November 15-19; New Orleans, LA. [poster]
12. **Zahnd WE** and Mueller GS. The Three "R's" of Cancer from Rock Falls to Rushville to Rosiclare: How Cancer Differs across Three Rural Regions of Illinois. 2014 Illinois Rural Health Association Conference. 2014 August 14-15. Effingham, IL. [oral]
11. Smith T, Engle K, **Zahnd W**, Cleer M. Bridging the gap: outcomes from an assessment of nutrition and physical activity habits and knowledge of medical students and parents. Association for Prevention Teaching and Research Annual Meeting. 2014 March 20-21; Washington DC. [poster]
10. Mueller G, **Zahnd WE**, Garner K, Heitkamp R, Jenkins WD, Boehler M, Land D, Steward DE. The "Mini-Report": use of CBPR to create a practical tool to address lung cancer disparities in rural communities. 6th AACR Conference on the Science of Health Disparities in Racial/Ethnic Minorities and the Medically Underserved. 2013 December 6-9; Atlanta, GA. [poster]
9. **Zahnd WE**, Steward DE, Jenkins WD, Andoh J, Mueller G, Puczynski S. Barriers to completion of a free colorectal cancer screening program in a low-income population. 6th AACR Conference on the Science of Health Disparities in Racial/Ethnic Minorities and the Medically Underserved. 2013 December 6-9; Atlanta, GA. [poster]
8. Reynolds KL, Montgomery L, Klamen DL, Szauter K, Verhulst SJ, **Zahnd W**. Perceptions of medical student-nurse interaction. The Central Group on Educational Affairs meeting. 2013 March 21-23; Cincinnati, OH. [poster]
7. Stehling D\*, McAsey ME, Groesch K, **Zahnd WE**, Rodrigo G. Postpartum colposcopy: A review of factors associated with improved patient compliance. Central Association of Obstetrics and Gynecology Annual Meeting. 2012 October 17-20; Chicago, IL. [poster]

6. Steward DE, Smith T, Ryherd SJ, Jones M, Germann B, Harris M, Phelps M, Locke A, **Zahnd WE**. Academic-community-public health collaboration to prevent childhood obesity. Centers for Disease Control and Prevention, Weight of the Nation Annual Conference. 2012 May 7; Washington, D.C. [poster]
5. Jenkins WD, Kovach R, Wold B, **Zahnd WE**. Utility of a screening questionnaire in the Emergency Department to predict chlamydia and gonorrhea infection. National STD Prevention Conference. 2012 March 12; Minneapolis, MN. [poster]
4. Jenkins WD, Kovach R, **Zahnd WE**. Systematic review of chlamydia and gonorrhea screening in emergency departments. American Public Health Association Annual Meeting; 2010 November 9; Denver, CO. [poster]
3. Rethnam R, Henkle JQ, Hopkins-Price, Scaife S, **Zahnd WE**, Francis M. Survival benefit with pulmonary artery catheter placement in patients with combined sepsis and congestive heart failure compare to patients with only sepsis or heart failure. 38<sup>th</sup> Critical Care Congress of the Society of Critical Care Medicine. 2009 January 31-February 4; Nashville, TN. [poster]
2. Varghese JJ\*, Koneru S, Scaife SL, **Zahnd W**, Rumman S, Francis ML. Clinical implications of the choice of therapy for patients with rheumatoid arthritis and lupus after acute myocardial infarction. 57<sup>th</sup> Annual Scientific Session of the American College of Cardiology. 2008 March 29-April 1; Chicago, IL. [poster]
1. Varghese JJ\*, Koneru S, Scaife SL, **Zahnd W**, Francis ML. Improved in-hospital mortality of rheumatoid arthritis patients undergoing coronary revascularization procedures: rheumatoid arthritis paradox. 57<sup>th</sup> Annual Scientific Session of the American College of Cardiology. 2008 March 29-April 1; Chicago, IL. [poster]

#### **Invited Presentations**

**(numbered in chronological order; listed in reverse chronological order)**

25. “Staying Connected while Social Distant: A Spatial Analysis of Broadband Access and Implications for Peri-Pandemic and Post-Pandemic Times”, University of South Carolina Big Data Health Science Center National Big Data Health Science Conference, 2021 February 5.
24. “A Spatial Approach to Evaluating Potential and Realized Access to Broadband Services--A ‘Super-Determinant of Health’”, University of South Carolina Big Data Health Science Center Monthly Seminar, 2021 January 27.
23. “Contextualizing “Rural” in Cancer Disparities Research”, UNC Lineberger Comprehensive Cancer Center Cancer Outcomes Program Virtual Research Seminar, 2021 January 19.
22. “The importance of examining the intersection of rural-urban status and race/ethnicity in cancer surveillance research: an early-onset colorectal cancer example”, North American Association of Central Cancer Registries Webinar, 2020 October 28.
21. “Using a Multilevel Framework to Evaluate and Address Rural Cancer Disparities across the Continuum”, University of South Carolina Arnold School of Public Health Virtual Research Seminar, 2020 October 20.
20. “Methodological Challenges and Solutions for Rural Health Research” American College of Epidemiology Annual Conference, 2020 September 22. [virtual presentation]
19. “Spatial and Health Service Research Approaches in Rural Cancer Control”, University of Iowa College of Public Health Virtual Research Seminar, 2020 July 6.

18. "Examining Rural Disparities across the Cancer Continuum", Wake Forest Baptist Comprehensive Cancer Center Cancer Prevention and Control Program Virtual Research Seminar, 2020 June 22.
17. "Rural-Urban Differences in Cancer Incidence and Trends in the United States", American Society of Preventive Oncology Annual Conference. 2020 May 14. Presented virtually as a webinar due to COVID-19
16. "Cancer Surveillance and Access to Care in Rural America", Rural Health Research Gateway, 2020 February 5. [webinar]
15. "Examining Rural Disparities across the Cancer Continuum", The Dartmouth Institute/Norris Cotton Cancer Center Research Seminar, 2020 January 31. Lebanon, NH.
14. "Examining Rural Cancer Disparities across the Continuum", Indiana University School of Public Health Research Seminar, 2020 January 15. Bloomington, IN.
13. "Colorectal Cancer in Rural South Carolina", Colorectal Cancer Screening Program in South Carolina Advisory Council Meeting, 2019 October 28. Columbia, SC.
12. "Leveraging multi-state cancer registry data to examine breast cancer disparities in a federally designated region", NAACCR Talk Webinar, 2019 October 9. [webinar]
11. "Rural Participation in Cancer Clinical Trials", Heartland National Community Oncology Research Program Annual Meeting, 2019 March 22. Springfield, IL. [virtual presentation]
10. "Spatial and Health Services Research Approaches to Examining Cancer Health Disparities", University of South Carolina Research Seminar, 2019 March 4. Columbia, SC.
9. "Utilization of Cancer Registry Data to Elucidate Cancer Incidence Disparities in Rural Populations", National Cancer Institute's Accelerating Rural Cancer Control Meeting, 2018 May 30. Bethesda, MD.
8. "Rural Health Career Forum", Illinois Rural Health Association, Illinois State University, 2018 April 7. Normal, IL.
7. "Using American Community Survey Data in Health Research", American Community Survey Data Users Conference Lunch Roundtable, 2017 May 11-12. Alexandria, VA.
6. "Health Research and Public Health: More than Rats, Microscopes, and Clean Air", Havana Health Career Opportunities, 2017 April 17. Springfield, IL.
5. "Radon Testing Patterns in Illinois and Implications for Public Health and Medical Practice", Radon 101: Brown Bag Lunch Series, SIU School of Medicine. 2017 January 27. Springfield, IL.
4. "Collaboration and Community Engagement to Address Cancer Disparities in Southern Illinois", Washington University in St. Louis and Southern Illinois University School of Medicine Rural Cancer Disparities Partnership Retreat. 2016 July 15. St. Louis, MO.
3. "Geospatial Analysis of Potential Environmental Causes of Cancer in Illinois", SIU School of Medicine/UIS Collaborative Research Seminar. 2014 November 14. Springfield, IL.
2. "Rural-Urban Differences in Health Literacy". SIU School of Medicine Division of Rheumatology Research Forum. 2009 April 3. Springfield, IL.



1. "Rural Health Literacy". 5th Annual Rural Public Health Institute: Preparing for Challenging Times. 2009 March 11. Effingham, IL.

### **Selected Media Coverage**

(numbered in chronological order; listed in reverse chronological order)

11. What is a "Pharmacy Desert" and why they make it harder for some people to get vaccinated in SC. WIS News. 2021 February 3. <https://www.wistv.com/2021/02/04/what-is-pharmacy-desert-why-they-make-it-harder-some-people-get-vaccinated-sc/> [interview]

10. Study Examines Rural-Urban and Racial/Ethnic Trends and Disparities in Early-onset and Average-onset Colorectal Cancer. ASPPH Friday Letter.2021 January 8. <https://aspph.cmail20.com/t/ViewEmail/d/97E5746F7D8DB2A12540EF23F30FEDED/8301804867752493E89F0E32AAFB68BF#more-news>

9. Early-onset colorectal cancer incidence higher among rural vs. urban populations. *HemOnc Today*. <https://www.healio.com/news/hematology-oncology/20201125/earlyonset-colorectal-cancer-incidence-higher-among-rural-vs-urban-populations> [interview]

8. Here's What's Driving the Rural South's COVID-19 Outbreaks. *Facing South*. <https://www.facingsouth.org/2020/05/here%27s-what%27s-driving-rural-souths-covid-19-outbreaks> [interview]

7. COVID-19 disproportionately impacts local minority groups. *The Daily Gamecock*. <https://www.dailygamecock.com/article/2020/04/the-coronavirus-impacts-minority-groups-news-hinkle> [interview]

6. Researchers Evaluate Access to Mammography Services in Lower Mississippi Delta Region States. ASPPH Friday Letter.2020 January 6. <https://www.aspph.org/south-carolina-researchers-evaluate-access-to-mammography-services-in-lower-mississippi-delta-region-states/>

5. Study: Urban And Rural Children Don't Have Equal Chance Of Living Into Adulthood. KUNC Public Radio. 2019 December 12. <https://www.kunc.org/post/study-urban-and-rural-children-don-t-have-equal-chance-living-adulthood#stream/0> [interview]

4. Analysis: Disparities in Rural Child Mortality Rates Persist Despite Improvements. *Daily Yonder*. 2019 December 9. <https://www.dailyyonder.com/analysis-disparities-in-rural-child-mortality-rates-persist-despite-improvements/2019/12/09/> [commentary]

3. Authors Develop a Conceptual Framework for Multilevel Analysis in Rural Cancer Control. ASPPH Friday Letter. 2019 November 27. <https://www.aspph.org/south-carolina-authors-develop-a-conceptual-framework-for-multilevel-analysis-in-rural-cancer-control/>

2. Guest View: Rural Health Care Providers Deserve Our Thanks. 2017 November 17. *State Journal-Register*. <http://www.sj-r.com/opinion/20171117/guest-view-rural-health-care-providers-deserve-our-thanks> [editorial]

1. Health Care Celebrated on National Rural Health Day. 2017 November 13. *Farm Week Now*. <http://digital.farmweeknow.com/app.php?RelId=6.9.3.0.1&BookCode=20171113&PageLabel=12&Sgt=11&lang=enu> [editorial]

### **TEACHING EXPERIENCE**

#### **Courses Taught**

South Carolina Honor College 499-Senior Thesis/Project

2020

University of South Carolina Honors College  
*Instructor of Record (2020)*

Epidemiology 767/867-Geographic Information Systems and Public Health Applications 2018,2020  
Department of Epidemiology and Biostatistics  
University of South Carolina Arnold School of Public Health  
*Assistant Instructor (2018)*  
*Co-Instructor (2020)*

Family and Community Medicine 493-Cancer Health Disparities, 2017-2018  
Department of Family and Community Medicine  
Southern Illinois University School of Medicine  
*Instructor of Record (2017-2018)*

Community Health 243-Drug Use and Abuse, 2005-2007  
Department of Kinesiology and Community Health  
University of Illinois at Urbana-Champaign  
*Instructor of Record (2005-2007)*

### **Guest Lectures**

**(numbered in chronological order; listed in reverse chronological order)**

25. "Social, Physical, Health Care, and Policy Contexts in Rural Cancer Control Research", University of Iowa College of Public Health, HMP 7910-Seminar in Contemporary Health Issues. March 12, 2021.

24. "Statistical Testing Parts I & II", University of South Carolina School of Medicine, Second Year Medical School Curriculum. April 13, 2020.

23. "Case-Control Study Design", University of South Carolina Arnold School of Public Health, EPID 410- Principles of Epidemiology. March 5, 2020.

22. "GIS Applications for Health Administration", University of South Carolina Arnold School of Public Health, HSPM 716-Quantitative Methods for Health Administration. March 2, 2020.

21. "Rural Health Disparities", Presbyterian College School of Pharmacy, PHRM 5202- Health Care Systems and Socioeconomics. February 13, 2020.

20. "Rural Health Workforce", University of South Carolina Arnold School of Public Health, HSPM 709-Perspectives in Rural Health. February 12, 2020.

19. "Measuring Disease Frequency", University of South Carolina Arnold School of Public Health, EPID 410- Principles of Epidemiology. January 28, 2020.

18. "Place-Based Disparities in Population Health", SIU-Edwardsville School of Pharmacy, PHEL 792-Pharmacy & Population Health. [annually, 2018-2020]

17. "Time Management for Doctoral Students and Public Health Professionals", University of South Carolina Arnold School of Public Health, EPI 845-Doctoral Seminar, Fall 2019 and Spring 2021.

16. "Lung Cancer Screening", University of South Carolina Arnold School of Public Health, EPI 746-Cancer Epidemiology, Spring 2019 and Spring 2021.

15. "Sampling and External Validity", University of South Carolina Arnold School of Public Health, HSPM 719-Health Services Research Methods II [annually 2019-2021]
14. "Place-Based and Rural Cancer Disparities", University of South Carolina Arnold School of Public Health, EPI 746-Cancer Epidemiology, Spring 2019 and Spring 2021
13. "Key Rural Health Care Resources and Institutions", University of South Carolina Arnold School of Public Health, HSPM 709-Perspectives in Rural Health, February 6, 2019.
12. "Introduction to Population Health and Prevention", SIU School of Medicine MS Year 1, Cardiovascular, Respiratory, and Renal Population Health and Prevention Lecture, October 26, 2017.
11. "Study Design—Strength of Evidence and Practicality", SIU School of Medicine MS Year 2, Cardiovascular, Respiratory, and Renal Population Health and Prevention Lecture, October 19, 2017.
10. "Zika Epidemiology and Surveillance", SIU School of Medicine MS Year 2 Hematology, Infections, and Immunology Unit Population Health and Prevention Lecture, August 30, 2017.
9. "Research Design and Basic Statistics", SIU School of Medicine Department of Pediatrics Resident Research Meeting, February 16, 2017.
8. "It's a 40<sup>th</sup> Anniversary Celebration", SIU School of Medicine MS Year 2 Cardiovascular, Respiratory, and Renal Unit Population Health and Prevention Lecture, October 28, 2016.
7. "Zika Epidemiology and Surveillance", SIU School of Medicine MS Year 2 Hematology, Infections, and Immunology Unit Population Health and Prevention Lecture, September 14, 2016.
6. "Using Secondary Databases in Research", SIU School of Medicine Department of Psychiatry Resident Research Seminar, July 29, 2016.
5. "Introduction to Data Management and Statistical Analysis in SPSS", SIU School of Medicine Department of Neurology Research Meeting, April 12, 2016.
4. "Health Research: More than Rats and Microscopes", University of Illinois Urbana-Champaign CHLH 250-Health Care Systems, November 10, 2015.
3. "Using Secondary Databases in Research", SIU School of Medicine Department of Psychiatry Resident Research Seminar, July 24, 2015.
2. "Types of Health Literacy Measurement Tools", SIU School of Medicine Doctoring Course, January 12, 2011.
1. "Measuring Health Literacy". SIU School of Medicine Doctoring Course [annually 2009-2010]

### **Continuing Education Online Modules**

1. "Radon Module: Predictors & Spatial Variation of Radon Testing in Illinois", 0.75 Continuing Education Credits for physicians, mid-level providers, nurses, respiratory therapists, radon technicians.  
<https://www.highmarksce.com/siumed/index.cfm?do=ev.viewEnduring&attendeelD=-1&eventID=4351>

## STUDENT SUPERVISION/MENTORSHIP

### Graduate Students, Ongoing

Name	Year	Title/Topic and Role
Radhika Ranganathan, UofSC MSPH Student (Epidemiology)	2019-present	Racial/Ethnic, Geographic, and Socioeconomic Disparities in Molecular Testing among Breast Cancer Patients (Graduate Research Assistant Supervisor)  Cancer Prevention and Control Research Network (Scholar Program Mentor)
Allie Silverman, UofSC MSW/MPH Student	2020-present	Assessing cancer care coordination during a pandemic (Graduate Research Assistant Supervisor)
Gabriel Benavidez, UofSC PhD Student (Epidemiology)	2019-present	NIH Behavioral-Biomedical Interface Program Pre-doctoral Fellowship (Secondary Mentor)

### Graduate Students, Completed

Name	Year	Title/Topic
Skyler Taylor (Medical Student, SIU School of Medicine)	Summer 2018	Rural-Urban Trends in Incidence and Mortality of Gastrointestinal Cancers in the United States (Mentored Professional Education Experience Mentor)

### Undergraduate Students, Ongoing

Name	Year	Title/Topic
Cathryn Murphy (UofSC, Biochemistry)	2019-Present	Assessment of Rural Inclusion in Comprehensive Cancer Control Planning (Research Project Supervisor)

### Undergraduate Students, Completed

Name	Year	Title/Topic
Allison Holker (UofSC, Public Health)	2020	A Qualitative Look at Differential Access to Health Care in Rural South Carolina (Honors College Thesis Advisor)
Claire Biesecker (UofSC, Public Health)	2019	Bivariate Mapping in Cancer Prevention (Public Health Practicum Co-Mentor) *Won the Best Poster Award at the Clyburn Health Disparities Lecture and Undergraduate Honorable Mention at Discover USC
Chesni Cobb (Biology, Clafin University)	2019-2020	South Carolina-Advancing Diversity in Ageing Research Program (Secondary Mentor)
Jessica Lee (UofSC, Public Health)	2018-2019	Financial toxicity among rural cancer patients in the U.S. (Public Health Practicum Co-Mentor)

## PROFESSIONAL SERVICE ACTIVITIES

### Institutional Committees and Activities (University of South Carolina)

Reviewer, Clemson University/University of South Carolina COVID-19 Challenge	Summer 2020
Co-Director, Big Data Health Science Center Geospatial Core	2020-present
Member, Big Data Health Science Center Geospatial Core	2019-present
Member, Magellan Scholar Review Committee	Fall 2019
Social Media Coordinator, Rural & Minority Health Research Center	2018-present

### Institutional Committees and Activities (SIU School of Medicine)

Social Media Coordinator, Office of Population Science and Policy	2017-2018
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Member, Community Engagement Team, Office of Population Science and Policy	2017-2018
Member, Internal Subcommittee of the Community Health Policy Committee	2016-2017
Member, Minors on Campus Task Force	2015-2016
Chair, Research and Evaluation Subcommittee of the Community Health Policy Committee	2015
Member, Community Health Policy Committee	2013-2017
Member, Collaboration to Reduce Lung Cancer Disparities in the Southern Illinois Delta Region Steering Committee	2012-2015
Member, Research and Evaluation Subcommittee of the Community Health Policy Committee	2011-2015
Member, Springfield Collaborative for Active Child Health	2010-2016
Member, Internal Medicine Cabinet	2009-2010

### **External Committees and Activities**

Member, Planning Committee for AACR 14 <sup>th</sup> Annual Conference on the Science of Cancer Health Disparities in Racial/Ethnic Minorities and the Medically Underserved	2021
Member, Cancer Prevention and Control Research Network Rural Cancer Workgroup	2018-present
Member, South Carolina Cancer Alliance HPV Vaccination Workgroup	2018-2021
Facilitator, Illinois Cancer Partnership, State Cancer Plan Prevention Sub Workgroup	2016
Member, Illinois Cancer Partnership, State Cancer Plan Early Detection Sub Workgroup	2016
Member, Data Safety Monitoring Committee, Phase I Study of MK-3475 in Combination with BCG for Patients with High-Risk Superficial Bladder Cancer	2016-2018
Member, Illinois Cancer Partnership	2015-2017
Member, Illinois Cancer Partnership, State Cancer Plan Work Group	2015-2016
Student Member, Interprofessional Student Hotspotting Learning Collaborative (Southern Illinois University team)	2015-2016
Member, Southern Illinois Healthcare, Community Health Needs Assessment Cancer Implementation Team	2015
Member, St. John's Hospital Childhood Obesity Program	2015-2016

### **Editorial and Review Activities**

#### **Editorial Boards**

Editorial Board, <i>Journal of Rural Health</i>	2021-present
Board of Statisticians, <i>Journal of Urology</i>	2018-2019
Guest Editor, <i>International Journal of Environmental Research and Public Health</i> Special Issue	

#### **Ad Hoc Peer Reviewer**

*American Journal of Epidemiology, American Journal of Preventive Medicine, Annals of Epidemiology, BMJ Open, Cancer, Cancer Causes & Control, Cancer Epidemiology Biomarkers & Prevention, Cancer Medicine, Evaluation and Program Planning, Health & Place, Health Promotion Practice, International Journal of Environmental Research and Public Health, Journal of Health Care for the Poor and Underserved, Journal of the National Comprehensive Cancer Network, Journal of Public Health Management and Practice, Journal of Racial and Ethnic Health Disparities, Journal of Rural Health, Journal of Thoracic Oncology, Preventing Chronic Disease, Research in Social and Administrative Pharmacy, Social Science & Medicine, Supportive Care in Cancer*

#### **Grant Reviewer**

Yorkshire Cancer Research	2016
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#### **Abstract Reviewer**

National Rural Health Association Annual Conference	2021
North American Association of Central Cancer Registries Annual Conference	2019-2021

American Public Health Association Epidemiology Section 2017

**Professional Memberships**

Member, National Rural Health Association Research and Education Constituency Group 2020-present  
Member, National Rural Health Association 2019-present  
Associate member, American Association for Cancer Research 2016-present  
Student member, American Public Health Association 2015-2016  
Member, North American Association of Central Cancer Registries 2014-present  
Member, Illinois Rural Health Association 2013-2018

**COMMUNITY SERVICE ACTIVITIES**

Pen Pal, Letters to a Pre-Scientist Program 2019-2020  
Co-Leader, Hands-On Healthcare 2017-2018  
Co-Leader, Healthcare Explorers of Central Illinois 2016-2017  
Member, DuBois Elementary School Wellness Committee 2015-2016  
Lead Adviser, Medical Explorers Post 998 2009-2016  
Community-Based Mentor, Big Brothers Big Sisters of the Illinois Capital Region 2007-2015

**SOFTWARE COMPETENCIES**

ArcGIS Desktop, ArcGIS Pro, EndNote, GeoDa, Joinpoint Regression, Mendeley, Microsoft Office Suite, SAS, SEER\*Stat