

Natalie R Smith

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Education

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|----------------|------------|--|
| 2017 – Present | PhD | Health Policy and Management
Gillings School of Global Public Health, UNC Chapel Hill, NC <ul style="list-style-type: none">Promoting cost-effectiveness for public health policymaking: The case of sugar-sweetened beveragesLeah Frerichs (chair), Kristen Hassmiller Lich, Justin Trogon, Marissa Hall, Shuwen Ng |
| 2015 – 2017 | MS | Biostatistics
Gillings School of Global Public Health, UNC Chapel Hill, NC |
| 2011 – 2015 | BS | Interdisciplinary Science (statistics and epidemiology)
Minors in biology and sociology
Purdue University, West Lafayette, IN |

Major research interests

- Building and communicating simulation models to inform public health decision making
- State and federal policy for chronic disease prevention and control
- Social network and built environment influences on chronic diseases

Research experience

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| 2018 – 2021 | Biosocial predoctoral trainee (NIH T32 HD091058)
Carolina Population Center, UNC Chapel Hill |
| 2017 – 2018 | Graduate Research Assistant
Department of Health Policy and Management, UNC Chapel Hill |
| 2015 – 2017 | Graduate Research Assistant
Center for Health Promotion and Disease Prevention, UNC Chapel Hill |
| 2016 | Health Improvement Intern
Association of State and Territorial Health Officials |
| 2015 | Research Assistant
North Central Nutrition Education Center for Excellence |

2014 – 2015	Research Assistant Purdue Center on Aging and the Life Course
2013	Summer Intern National Institute of Environmental Health Sciences

Peer-reviewed publications

1. **Smith, N.R.**, Zivich, P., Frerichs, L., Moody, J., & Aiello, A.E. (2020). A guide for choosing community detection algorithms in social network studies: The Question-Alignment approach. *American Journal of Preventive Medicine*. Accepted, in press.
2. **Smith, N.R.**, Grummon, A.H., & Frerichs, L. (2020). Demographic groups likely affected by regulating sugar-sweetened beverage portion sizes. *American Journal of Preventive Medicine*. Accepted, in press.
3. **Smith, N. R.**, Zivich, P. N., & Frerichs, L. (2020). Social Influences on Obesity: Current Knowledge, Emerging Methods, and Directions for Future Research and Practice. *Current Nutrition Reports*, 9(1), 31-41.
4. Grummon, A. H., **Smith, N. R.**, Golden, S. D., Frerichs, L., Taillie, L. S., & Brewer, N. T. (2019). Health Warnings on Sugar-Sweetened Beverages: Simulation of Impacts on Diet and Obesity Among US Adults. *American journal of preventive medicine*, 57(6), 765-774.
5. Frerichs, L., **Smith, N. R.**, Lich, K. H., BenDor, T. K., & Evenson, K. R. (2019). A scoping review of simulation modeling in built environment and physical activity research: Current status, gaps, and future directions for improving translation. *Health & place*, 57, 122-130.
6. Frerichs, L., **Smith, N. R.**, Lyden, J., Gaskin, K., Skinner, A., & Armstrong, S. (2018). Weight-related quality of life and temperament as predictors and moderators of outcomes among treatment-seeking, low-income, ethnically diverse children with obesity. *Translational behavioral medicine*, 10(1), 244-253.
7. Linnan, L., Arandia, G., Bateman, L. A., Vaughn, A., **Smith, N.**, & Ward, D. (2017). The health and working conditions of women employed in child care. *International journal of environmental research and public health*, 14(3), 283.
8. **Smith, N. R.**, Ferraro, K. F., Kemp, B. R., Morton, P. M., Mustillo, S. A., & Angel, J. L. (2016). Childhood misfortune and handgrip strength among Black, White, and Hispanic Americans. *The Journals of Gerontology: Series B*, 74(3), 526-535.
9. **Smith, N. R.**, Jensen, B. W., Zimmermann, E., Gamborg, M., Sørensen, T. I., & Baker, J. L. (2016). Associations between birth weight and colon and rectal cancer risk in adulthood. *Cancer epidemiology*, 42, 181-185.
10. Jaff, D. O., Aziz, T. A., & **Smith, N. R.** (2015). The incidence of rotavirus and adenovirus infections among children with diarrhea in Sulaimani Province, Iraq. *Journal of Biosciences and Medicines*, 4(1), 124-131.
11. Schiffenbauer, A., **Smith, N.**, Rider, L.G., & Miller, F.W. (2015). Tobacco Smoking in Different Racial Groups Is Differentially Associated with the Development of Myositis Autoantibodies and Interstitial Lung Disease in the Idiopathic Inflammatory Myopathies. *Arthritis & Rheumatology*, 67, 393-395.

Papers in progress

1. **Smith, N.R.**, Mazzucca, S., Hall, M.G., Brownson, R.C., & Frerichs, L. Opportunities to improve dissemination of health research by understanding research priorities of state legislators.
2. Martinez, R.A., Andrabi, N., Goodwin, A.N., Wilbur, R.E., **Smith, N.R.**, Zivich, P.N., Aiello, A.E., & Hummer, R.A. A systematic review of the use of race and ethnicity in U.S. medical research.
3. Frerichs, L., **Smith, N.R.**, Kuhlberg, J.A., Mason, G., Jackson-Diop, D., Stith, D., Corbie-Smith, G., & Hassmiller Lich, K. Novel participatory methods for co-building an agent-based model of physical activity with youth.
4. Zivich, P.N., Sumner, K.M., **Smith, N.R.**, & Aiello, A.E. The state of network analysis in main-stream epidemiology journals.

Awards and honors

2020	Harry T. Phillips Award for Outstanding Teaching by a Doctoral Student UNC Department of Health Policy and Management
2020	<i>Finalist</i> , HSRproj Research Competition for Students, AcademyHealth
2019	UNC Department of Health Policy and Management Travel Grant (\$500)
2017	UNC Department of Health Policy and Management Travel Grant (\$500)
2017	UNC Graduate School Travel Grant (\$500)
2017	Delta Omega Public Health Honors Society, Theta chapter
2015	Interdisciplinary Science Outstanding Senior; College of Science Honors Convocation Awardee

Extracurricular training

2020 – 2021	US Policy Communication Training Program Population Reference Bureau (1-week training, yearlong practicum)
2019	Communicating Research Workshop UNC Chapel Hill (two-day workshop)
2018	Stochastic Network Modeling University of Kentucky, LINKS Center for Social Network Analysis (1-week)
2018	Social Networks and Health Duke University, Duke Network Analysis Center (1-week)

Teaching experience

Spring 2020	Graduate Teaching Assistant HPM 883: Categorical Data Analysis Instructor: Marisa Domino
Fall 2019	Guest Lecturer – Deterministic and probabilistic sensitivity analyses HPM 772: Techniques for the Economic Evaluation of Healthcare Instructor: Leah Frerichs
Summer 2017	Graduate Teaching Assistant HPM 611: Public Health Concepts and Systems Thinking, Instructor: Leah Frerichs
2016 – 2017	Peer Tutor UNC Gillings Academic Enrichment Program in Biostatistics
Spring 2016 & Fall 2015	Graduate Teaching Assistant BIOS 600: Introduction to Biostatistics Instructor: Marcus Hermann-Giddens

Research positions

2018 – 2021	Biosocial Predoctoral Trainee, Carolina Population Center preceptors: Leah Frerichs (UNC) and Jim Moody (Duke)
2017 – 2018	Graduate Research Assistant, UNC Department of Health Policy and Management
2015 – 2017	Graduate Research Assistant, UNC Center for Health Promotion and Disease Prevention
Summer 2016	Health Improvement Intern, Association of State and Territorial Health Officials
Summer 2015	Research Assistant, North Central Nutrition Education Center for Excellence
2014 – 2015	Research Assistant, Purdue Center on Aging and the Life Course
Summer 2013	Intern, National Institutes of Environmental Health Sciences

Refereed conference presentations

1. **Smith, N.R.**, Mazzucca, S., Hall, M.G., Ng, S.W., & Frerichs, L. Identifying groups of policymakers with similar communication preferences to better tailor public health- and nutrition-related research communications. *Poster presentation scheduled for the 2020 Interdisciplinary Association for Population Health Sciences annual meeting, Sept 20-Oct 2 (virtual due to COVID-19).*
2. Martinez, R.A., Andrabi, N., Goodwin, A.N., Wilbur, R.E., **Smith, N.R.**, Zivich, P.N., Aiello, A.E., & Hummer, R.A. A cross-disciplinary systematic review of race and ethnicity in U.S. population health research. *Oral presentation scheduled for the Interdisciplinary Association for Population Health Sciences annual meeting, Sept 30 - Oct 2, virtual due to*

COVID-19. Note: *this presentation will include results from epidemiology and medical sociology in addition to our 2019 results on medical research.*

3. Silva, R., Feng, A., **Smith, N.**, Wunder, J., & Evenson, K.R. (2019) Direct and indirect health effects of urban natural environments – latest findings support benefits of urban parks. *Oral presentation at the American Public Health Association annual meeting, Philadelphia, PA.*
4. **Smith, N.R.**, Grummon, A.H., & Frerichs, L. (2019). Populations potentially affected by sugar-sweetened beverage portion size laws. *Oral presentation at the Interdisciplinary Association of Population Health Sciences meeting, Oct 1-4, Seattle, WA.*
5. Martinez, R.A., Andrabi, N., Goodwin, A.N., Wilbur, R.E., **Smith, N.R.**, Zivich, P.N., Aiello, A.E., & Hummer, R.A. A systematic review of the use of race and ethnicity in U.S. medical research. *Poster presented at the Interdisciplinary Association for Population Health Sciences meeting, Oct 1-4, Seattle, WA.*
6. Grummon, A.H., **Smith, N.R.**, Golden, S.D., Frerichs, L., Taillie, L.S., & Brewer, N.T. (2019). Dietary and weight loss benefits of a national sugar-sweetened beverage health warning policy: A microsimulation analysis. *Oral presentation at the American Society for Nutrition Annual Meeting, June 8-11, Baltimore, MD.*
7. **Smith, N.R.**, Frerichs, L., Minyard, K., MacDonald Gibson, J., & Hassmiller Lich, K. (2019). Bridging the research-to-policy gap using simulation modeling: Recommendations for building simulation models to support public health decision making. *Poster presented at the AcademyHealth Annual Research Meeting, June 2-4, Washington, DC*
8. **Smith, N.R.**, Frerichs, L., Minyard, K., MacDonald Gibson, J., & Hassmiller Lich, K. (2019). Bridging the research-to-policy gap using simulation modeling: Recommendations for building simulation models to support public health decision making. *Poster presented at the first annual Biosocial Symposium, May 13, Chapel Hill, NC.*
9. **Smith, N.R.**, Tate, D., Nieberg, R., Espeland, M.A., & Wing, R.R. (2018). A 10-year cost-effectiveness simulation study of a novel approach to weight gain prevention in young adults: the SNAP intervention. *Poster presented at the Interdisciplinary Association for Population Health Science Annual Meeting, Washington, DC.*
10. **Smith, N.R.**, Frerichs, L., Hassmiller Lich, K., Moody, J., Corbie-Smith, G., & Aiello, A.E. (2018). Associations between college students' and their peers' physical activity using peer social network measures. *Poster presented at the Society of Behavioral Medicine Annual Conference, New Orleans, LA.*

Book Chapters

1. Frerichs, L & **Smith, N.R.** (2020). Designing Population Health Research Grounded in Complex Systems Science. in *Complex Systems and Population Health*. Apostolopoulos, Y., Hassmiller Lich, K., & Lemke, M.K. Oxford University Press.

Briefs

1. Urban parks and housing prices: a rapid review and update for the Dorothea Dix Park Conservancy, January 2019.
2. Oregon Works to Improve Type 2 Diabetes Metrics through Legislation and Strategic Partnerships. Association of State and Territorial Health Officials, 2016.

Service

2020	Abstract reviewer, Interdisciplinary Association for Population Health Sciences
2020	Session moderator, UNC master's presentations
2017 – Pr	Advisory Committee, Carolina Community Garden

Professional memberships

2019 – Pr	AcademyHealth
2018 – Pr	Interdisciplinary Association for Population Health Science
2017 – 2018	Society of Behavioral Medicine
2017 – 2019	American Statistical Association

Ad hoc reviewer

Value in Health; Social Science and Medicine: Population Health; Journals of Gerontology
Social Science; Translational Behavioral Medicine