Karl Timothy Johnson

Assistant Professor

Department of Public Health Leadership and Practice
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EDUCATION

The University of North Carolina, Chapel Hill, NC – June 2023

The Gillings School of Global Public Health
PhD Student in the Department of Health Policy and Management
Concentration: Decision Science and Outcomes Research

<u>Dissertation title:</u> Public Health Governance to Advance Public Health 3.0—Interrogating the Strategies and Structures of Local Governmental Health Departments to address the Social Determinants of Health in North Carolina and across the Country

<u>Committee Members:</u> Dr. Kristen Hassmiller Lich (Chair), Dr. John Wiesman, Kristi A. Nickodem, Esq., Dr. Todd Jensen, Dr. Dorothy Cilenti

Johns Hopkins University, Baltimore, MD – May 2018

Bachelor of Arts: Economics Honors in Humanistic Studies

RESEARCH SCHOLARSHIP

Peer-reviewed publications

- Karl Johnson, PhD, Nidhi Rao Oruganti, BSPH, Dorothy Cilenti, MSW, DrPH, John Wiesman, DrPH, MPH, Todd Jensen, MSW, PhD, Kristen Hassmiller Lich, PhD (2024). Local Public Health Strategies for Addressing Social Determinants of Health -- Analysis of Recent Community Health Improvement Plans. *Journal of Public Health Management* and Practice (in press)
- 2. **Karl Johnson**, PhD, Todd Jensen, MSW, PhD, Dorothy Cilenti, MSW, DrPH, John Wiesman, DrPH, MPH, Kristen Hassmiller Lich, PhD (2024). Investigating the Role of Local Board of Health Governance on Local Health Department Policymaking Behavior. *Journal of Public Health Management and Practice* (in press)
- 3. **Karl Johnson**, Juan Yanguela Eguizabal, Dorothy Cilenti, John Wiesman, Todd Jensen, Kristen Hassmiller Lich (2024). Assessing Local Public Health Governance in North Carolina across Organizational and Governance Configurations. *North Carolina Medical Journal* (in press)
- 4. Malhotra, A., Ryckman, T. S., **Johnson, K.**, Uhlig, E., Creswell, J., Kendall, E. A., ... & Sohn, H. (2024). Active case-finding of tuberculosis compared with symptom-driven standard of care: a modelling analysis. *International Journal of Epidemiology*, *53*(2), dyae019.
- 5. **Johnson, K.**, Biddell, C. B., Gora Combs, K., Wiesman, J., Valdes Lupi, M., & Hassmiller Lich, K. (2023). Local Health Department Values and Organizational Authorities Guiding Cross-Sector Work During COVID-19. *Health Promotion Practice*, 15248399231192989.

- 6. **Johnson, K.,** Biddell, C. B., Hecht, H. K., Lich, K. H., Swann, J., Delamater, P., ... & Patel, M. D. (2022). Organizational decision-making during COVID-19: A qualitative analysis of the organizational decision-making system in the United States during COVID-19. *Journal of Contingencies and Crisis Management*.
- 7. Biddell, C. B., **Johnson, K. T.**, Patel, M. D., Smith, R. L., Hecht, H. K., Swann, J. L., ... & Hassmiller Lich, K. (2022). Cross-sector decision landscape in response to COVID-19: a qualitative network mapping analysis of North Carolina decision-makers. *Frontiers in Public Health*, 10.
- 8. **Johnson, Karl,** Caitlin B. Biddell, Kristen Hassmiller Lich, Julie Swann, Paul Delamater, Maria Mayorga, Julie Ivy, Raymond L. Smith, and Mehul D. Patel. "Use of Modeling to Inform Decision Making in North Carolina during the COVID-19 Pandemic: A Qualitative Study." *MDM Policy & Practice* 7, no. 2 (2022): 23814683221116362.
- 9. Rosenstrom, Erik T., Jessica Mele, Julie S. Ivy, Maria E. Mayorga, Mehul D. Patel, Kristen Hassmiller Lich, **Karl Johnson** et al. "Can vaccine prioritization reduce disparities in COVID-19 burden for historically marginalized populations?." *PNAS Nexus* 1, no. 1 (2022): pgab004.
- 10. **Johnson, K.,** Saylor, K. W., Guynn, I., Hicklin, K., Berg, J. S., & Lich, K. H. (2022). A systematic review of the methodological quality of economic evaluations in genetic screening and testing for monogenic disorders. *Genetics in Medicine*, 24(2), 262-288.
- 11. **Karl Johnson**, Elizabeth Uhlig, Hojoon Sohn, David Dowdy. (2021) Evaluation of impact and cost-effectiveness of innovative Active Case Finding strategies for tuberculosis case detection in the remote communities in Cambodia. *PloS One*.
- 12. **Johnson, K.,** Tepper, M., Leff, H. S., Mullin, B. O., Cook, B. L., & Progovac, A. M. (2021). Assessing the Long-Term Effectiveness of a Behavioral Health Home for Adults With Bipolar and Psychotic Disorders. *Psychiatric Services*, appi-ps.
- 13. Jo, Y., Kagujje, M., **Johnson, K.**, Dowdy, D., Hangoma, P., Chiliukutu, L., ... & Sohn, H. (2021). Costs and cost-effectiveness of a comprehensive tuberculosis case finding strategy in Zambia. *PloS one*, *16*(9), e0256531.
- Patel, M.D., Rosenstrom, E., Ivy, J.S., Mayorga, M.E., Keskinocak, P., Boyce, R.M., Lich, K.H., Smith, R.L., Johnson, K.T., Delamater, P.L. and Swann, J.L., 2021.
 Association of Simulated COVID-19 Vaccination and Nonpharmaceutical Interventions With Infections, Hospitalizations, and Mortality. *JAMA network open*, 4(6), pp.e2110782-e2110782.
- 15. **Johnson, K. T.**, Palakshappa, D., Basu, S., Seligman, H., & Berkowitz, S. A. (2021). Examining the bidirectional relationship between food insecurity and healthcare spending. *Health Services Research*.
 - "Top Cited Article" in Health Services Research (Among work published in an issue between 1 January 2021 15 December 2022.)
- 16. Basu, S., **Johnson, K. T**., & Berkowitz, S. A. (2020). Use of Machine Learning Approaches in Clinical Epidemiological Research of Diabetes. *Current Diabetes Reports*, 20(12), 1-19.
- 17. Ferguson, O., Jo, Y., Pennington, J., **Johnson, K.**, Chaisson, R. E., Churchyard, G., & Dowdy, D. (2020). Cost-effectiveness of one month of daily isoniazid and rifapentine versus three months of weekly isoniazid and rifapentine for prevention of tuberculosis among people receiving antiretroviral therapy in Uganda. *Journal of the International AIDS Society*, 23(10), e25623.
- 18. Bell, O. N., Hole, M. K., **Johnson, K.**, Marcil, L. E., Solomon, B. S., & Schickedanz, A. (2019). Medical-Financial Partnerships: Cross-Sector Collaborations Between Medical and Financial Services to Improve Health. *Academic Pediatrics*.

- Salvatore, P., Johnson, K., Vojnov, L., Doherty, M., & Dowdy, D. (2019). Clinical consequences of using an indeterminate range for early infant diagnosis of HIV: a decision model. JAIDS *Journal of Acquired Immune Deficiency Syndromes*, 82(3), 287-296
- 20. Braxton, A. M., Chalmin, A. L., Najarro, K. M., Brockhurst, J. **K., Johnson**, K. T., Lyons, C. E., ... & Guerrero-Martin, S. M. (2019). Platelet-endothelial associations may promote cytomegalovirus replication in the salivary gland in mice. *Platelets*, 1-9.
- 21. **Johnson, K**. T., Churchyard, G. J., Sohn, H., & Dowdy, D. W. (2018). Cost-effectiveness of preventive therapy for tuberculosis with isoniazid and rifapentine versus isoniazid alone in high-burden settings. *Clinical Infectious Diseases*, 30.
- 22. Quinn, C., **Johnson, K**., Raney, C., Baker, R. J., Topel, K., Tschudy, M. M., ... & Solomon, B. S. (2018). "In the clinic they know us": Preferences for clinic-based financial and employment services in urban pediatric primary care. *Academic pediatrics*.
- 23. Jaganath, D., **Johnson, K**., Tschudy, M. M., Topel, K., Stackhouse, B., & Solomon, B. S. (2018). Desirability of Clinic-Based Financial Services in Urban Pediatric Primary Care. *The Journal of pediatrics*.

Presentations

- Karl T Johnson. "From Sounding Board to Local Public Health Champion: Becoming a Strong Board of Health across North Carolina" (Annual meeting for the Association of North Carolina Boards of Health, September 2023)
- Karl T Johnson, Caitlin B. Biddell, Katherine Gora Combs, John Weisman, Monica Valdes Lupi, Kristen Hassmiller Lich. "Local Health Department Values and Organizational Authorities Guiding Public Health System Strengthening during COVID-19" (AcademyHealth, June 2022; NACCHO 360, July 2022)
- Caitlin Biddell, Karl Johnson, Mehul Patel, Julie Swann, Kristen Hassmiller Lich. "Bringing Communities to the Table: The Translation of State Guidance into Local Decision-Making during COVID-19" (State-University Partnership Learning Network Adjunct Meeting "Research and Relevance in State Health Policy", September 2021)
- Karl Johnson, Caitlin Biddell, Mehul Patel, Julie Swann, Kristen Hassmiller Lich. "Co-design of Decision-Support Model Analysis and Communication with Local Public Health Decision Makers during COVID-19" (State-University Partnership Learning Network Adjunct Meeting "Research and Relevance in State Health Policy, September 2021)

Peer-Reviewed Scholarship

- Journal of Public Health Management and Practice
 - o JPHMP-D-23-00525
 - o JPHMP-D-24-00022
 - o JPHMP-D-24-00059
 - o JPHMP-D-24-00150

TEACHING

Full Teaching Positions

• PUBH 696.015: Public Health through Hierarchies, Markets, and Networks (3 credits), Spring 2024 – MPH Students

• PUBH 785.001: Community Engagement for Governance (3 credits), Fall 2023 – MPH Students (Co-Instructor)

Partial Teaching Positions

- PUBH 992.973: Leadership in Practice Capstone Course (3 Credits), Spring 2024 (*Grading Assistance*)
- PUBH 805: Addressing Health Inequities and social Determinants of Health Through Service Learning (Coordination of trip to Granville Vance Public Health, 03/12/2024)

Teaching Assistantships

*All conducted in the Department of Health Policy and Management at the UNC Gillings School of Global Public Health

- HPM 785: Advanced Decision Modeling (3 credits), Spring 2022 PhD Students
- HPM 966: Systems Thinking & Collective Impact (3 credits), Spring 2022 PhD Students
- HPM 890.013 Systems Thinking for Collective Impact in Health (3 credits), Fall 2021 DrPH Students

Guest Lectures and Panel Participation

- PUBH781: Community Engagement & Leadership in Health ("Building, Maintaining, and Evaluating Coalitions", 03/20/2024)
- PUBH 992: Leadership in Practice Capstone Course ("Panel on Public Health Governance", 2/6/2024)

MENTORSHIP

DrPH Students

- DrPH Committee Member, Amy Belflower Thomas, Fall 2023—
- DrPH Committee Member, Katherine Wells, Fall 2023—

SERVICE

<u>Departmental Service</u>

- UNC Public Health Leadership and Practice, Community Collaborative, Member, Spring 2024—
- UNC Health Policy and Management Executive Advisory Committee, Student Representative, Fall 2022 – Spring 2023
- UNC Health Policy and Management Chair Search Committee, Student Representative, Fall 2022
 Spring 2023

University Service

- Lead for Certificate in Public Health Leadership (PHLP), Spring 2024—
- NACCHO Student Chapter at UNC-CH, Co-Faculty Advisor, Fall 2023—Spring 2024

- UNC Gillings Research Strategic Planning Task Force, student representative, Spring 2023-Fall 2023
- NACCHO Student Chapter at UNC-CH, External Relations Chair, Fall 2021—Spring 2023

External Service

- Board Member, Association of North Carolina Boards of Health, Spring 2024—
- Student Liaison to the APHA Community Health Worker section, Fall 2021 Spring 2022

PUBLIC HEALTH PRACTICE

Granville Vance Public Health

Behavioral Health Integration Specialist, 08/07/2023 –

- Developed and conducted Social Media and Youth Mental Health presentations to Granville county school principals.
- Hosted Mental Health and Substance Use forums at several local churches in the community.
- Developed and conducted trauma informed care training for GVPH staff.
- Developed Faith in Mental Health Certification program in partnership with local district representative, LME/MCO, and DHHS
- Conducted analysis to identify opportunities for new sites to integrate behavioral health within GVPH.
- Participated in multi-partner working groups and collaborations across the region to identify system-wide opportunities for improving access to behavioral health care.
- Assisted Vance and Granville County Opioid Advisory Committees to develop and implement RFP to determine best usage of Opioid Settlement Funds

North Carolina Association of Local Health Departments (NCALHD)

Consultant, 06/2020 – 10/2022

- Conducted regional listening sessions with Local Health Department directors across North Carolina to identify challenges and opportunities for local public health across the state.
- Assisted NCALHD's first-ever strategic planning retreat.
- Analyzed findings from the NCIOM's workgroup on the local public health data ecosystem.

Community Based Workforce Alliance (CBWA)

Consultant, 06/2020 – 06/2022

- Assisted in the development of the CBWA organizational structure, including the identification of core values and governance principles.
- Authored a major report on how to engage CHWs for COVID-19 response efforts, presented this report at several technical assistance webinars.
- Led a webinar (1000+ attendance) on how CHW-based organizations can secure HSRA funding.
- Lead technical assistance working groups for state-wide CHW organizations across the Southeast.

Better Veteran Health Communities (BVHC)

Research Assistant — 08/2022 – 12/2022

- Conducted and analyzed stakeholder interviews with veteran organizations in the Durham Veterans Affairs region.
- Developed core infrastructure for the BVHC website.

North Carolina Department of Health and Human Services (NC DHHS), Office of Rural Health Research Consultant, 06/2021 – 04/2022

 In partnership with Duke Family Medicine and Community Health, co-designed and co-led an evaluation of NC DHHS's CHW Program during COVID-19

Harvard Medical School, Health Equity Research Lab

Research Assistant, 06/2019 – 04/2022

- Assessed the effectiveness of Behavioral Health Homes for those with serious mental illnesses.
- Designed qualitative interviews to identify how predictors of opioid-related mortality can develop patient-centered treatment plans and prevention interventions.

HONORS

Awards

- The Francine and Harry Weinberger Award for Excellence, UNC Gillings Department of Health Policy and Management, Spring 2023
- Membership in Delta Omega, the Honor Society for Public Health, Theta Chapter, Spring 2024

Fellowships

- Adam Smith Fellowship, The Mercatus Center at George Mason University, Fall 2021 (\$5,000)
- Adam Smith Applied Fellowship, The Mercatus Center, George Mason University, Fall 2022
- Junior Fellowship, Institute for Humane Studies, George Mason University, Summer 2023
- Medical Fellow, Global Public Service Academies, Summer 2018 Summer 2019
- Affiliated Graduate Student, Philosophy Politics Economics Program at UNC, Fall 2021

CONTRACTS & GRANTS

- Local Government Federal Credit Union Diversity Equity Inclusion fund, UNC School of Government, Fall 2022 (\$4,200)
- Independent Research Grant, The Mercatus Center, George Mason University, Fall 2022 (\$4,000)
- Publication Accelerator Grant, Institute for Humane Studies, George Mason University, Fall 2022 (\$5,000)
- Cecil G. Sheps Center AHRQ/NRSA predoctoral training program in health services research, Fall 2022 (Finalist)
- Health Policy and Management Departmental Travel Award, Summer 2022 (\$900)