IRENE E. HEADEN, PhD, MS

Drexel University

Community Health and Prevention, Dornsife School of Public Health 3215 Market St., Room 451, Philadelphia, PA 19104 ORCID: 0000-0003-3728-4652

<u>ieh27@drexel.edu</u> (267)-359-6082

Education			
2015	PhD	University of California Berkeley, Division of Epidemiology	
2013	MS	University of California Berkeley, Division of Epidemiology	
2008	BS	Massachusetts Institute of Technology, Brain and Cognitive Science	
<u>Professional</u>	l Exper	<u>ience</u>	
2019-	Assistant Professor, Department of Community Health and Prevention, Drexel University Dornsife School of Public Health, Philadelphia, PA		
2017-2019	Postdoctoral Fellow, Drexel University, Urban Health Collaborative, Dornsife School of Public Health, Philadelphia, PA		
2015-2017	Postdoctoral Fellow, University of California Berkeley, Center of Excellence in Maternal and Child Health, Division of Community Health Sciences, Berkeley, CA		
2011-2015	Graduate Student Researcher, University of California Berkeley, Division of Epidemiology, School of Public Health, Berkeley, CA		
2012-2013	Summer Associate and Adjunct Researcher, RAND Corporation, Pittsburgh, PA		
2011	Graduate Student Researcher, University of California Berkeley, School of Public Health, Berkeley, CA; Partnership for Community Health		
2008-2010	Resea	arch Assistant, Urban Institute, Health Policy Center, Washington, DC	
Awards, Hor	nors, ar	nd Fellowships	
2022	Advisi Preve	ing and Mentoring Award for Department of Community Health and ention	
2015-2017		octoral Fellowship in Maternal and Child Health Epidemiology, Health urces and Services Administration Maternal and Child Health Bureau	

University of California Dissertation Year Fellowship, University of California

2014-2015

Office of the President

2014-2015 Susan Kersch DeYoung Memorial Fellowship, University of California Berkeley

School of Public Health

2013-2014 Wallace Lowe Fellowship, University of California Berkeley, School of Public

Health

2012 Maternal and Child Health Section Outstanding Student Author, American Public

Health Association

2010-2012 Chancellor's Fellowship for Graduate Study, University of California Berkeley

Research Support

Active

Robert Wood Johnson Foundation,127563 (PI: Barber) 03/2024 – 02/2027 Project Title: Illuminating and Addressing Structural Racism in the Healthcare Industry: Building

the Field from the Ground Up Total Amount: \$5,896,185

Description: Over the course of the three-year ISR project, our transdisciplinary team of researchers, thought leaders, and community organizers will engage in a community-centered and movement-informed process that addresses these gaps by engaging a diverse group of partners inclusive of community members, organizers and activists, scholars, medical/healthcare practitioners, and other key stakeholders nationally and across three to five regional sites to illuminate how structural racism "shows up" in the healthcare industry.

1U24NR02014, NIH/NINR (MPI: Carroll-Scott & Eberth) 09/2023-06/2028

Role: Co-Investigator

Project Title: Advancing Health Equity Through Innovative community Capacity Building, Data Science, & Delivering Community-Centered Structural Interventions & Outcomes: Drexel's ComPASS Coordinating Center (C3)

Total Amount: \$20,266,328

Description: This coordinating center will provide leadership, expertise, training, coordination, and infrastructure to support the coals of the ComPASS program and its grantees. As a part of this comprehensive approach, providing systems thinking and training in system dynamics as one of the tools accessible to grantees is a goal of this funding.

Commonwealth Universal Research Enhancement

8/2023-6/2026

(CURE; PI: Kemmick-Pintor)

Role: Co-Investigator

Project Title: `

Total Amount: \$70,500

Description: This community-based participatory research (CBPR) study implements and assesses the feasibility, acceptability, and sustainability of a community-driven, in- home postpartum peer support pilot that addresses a key factor in the well-being of birthing persons and their families in the postpartum period. The pilot provides emotional and practical peer (i.e. mothers with shared lived experiences) support, which is associated with lower likelihood of postpartum depression and these effects appear even stronger for mothers of color.

Philadelphia City Fund Innovation Fund (PI: Nia Coaxum)

8/2023-8/2024

Role: Co-Investigator

Project Title: The OVA's Community Investment Implementation Team Mini Grant Project

Total Amount: \$20,000

Description: Organized Voices for Action (OVA) is a multi-sector action team addressing issues of the maternal health crisis in Philadelphia. This project will launch a mini-grant program to support community-based organizations (CBOs) who provide services to Black birthing people and their families. These small-scale grants (\$1,000–\$2,500) will help Black-led and Black-serving CBOs cover technical assistance needs geared towards strategic planning and professional and organizational development.

R01NR020670-01, NINR (PI: Mendez) 9/2022-6/2027

Role: Consultant—Systems approaches to Structural Determinants

Project Title: The Effects of Medicaid Policy Interventions on Racial Equity in Severe Maternal

Morbidity

Total Amount: \$3,949,539

Description: This project aims to assess racial equity in Medicaid policy by conducting a multiarm intervention to study the impact of healthcare quality initiatives (i.e. equity incentive payment program, equity focused obstetric care bundle) with and without doula care services compared to standard care. The main outcome of interest is improvement in severe maternal morbidity in a Pennsylvania based Medicaid population.

AD-2020C3-20906, PCORI (MPI: Herring; McNeil) 11/2021-11/2026

Role: Consultant—Systems Dynamics for Evaluation

Project Title: The Path to Optimal Black Maternal Heart Health: Comparing Two CVD Risk

Reduction Interventions Total Amount: \$5,359,613

Description: This project aims to improve Black maternal heart health by implementing two multi-level, multi-system interventions to improve blood pressure and nutrition during pregnancy. Building on an existing mHealth intervention using adaptive goal setting and self-monitoring through text messaging, the project tests two structural interventions to mediate racism related stress: comprehensive implicit bias training of health care providers within women's care networks and additional health care support by Black woman lead community based maternal health organizations.

R01MD015107-02A1, NIMHD (PI: Langellier) 08/2021-04/2025

Role: Co-Investigator

Project Title: Complex systems approaches to identify policy levers to reduce racial/ethnic

disparities in diet and obesity in cities

Total Amount: \$561,582

Description: This project aims to use complex systems methods (i.e., system dynamics, group model building, and agent-based modeling) to understand the multilevel system of factors that drive racial/ethnic diet disparities and to identify policy levers to reduce diet disparities in cities.

K01MD015291-04, NIH/NIMHD (PI: Headen) 7/2020-7/2025

Role: Principal Investigator

Project Title: Systems Science Approaches to Understand Neighborhood Opportunity and

Racial/Ethnic Disparities in Maternal Morbidity

Total Amount: \$664,704

Description: This project aims to improve racial/ethnic disparities in maternal morbidity by building the evidence base on neighborhood context as a determinant of these disparities and contextualizing that evidence within the complex system of interrelationships within other multilevel determinants of maternal morbidity outcomes. Evidence obtained from this study will

contribute to the development of innovative interventions to eliminate racial/ethnic disparities in maternal morbidity occurring during the peripartum period.

Completed

U214N160055, Department of Education (PI: Kerman)

1/2016-12/2023

Role: Co-Investigator

Project Title: West Philadelphia Promise Neighborhood: Data & Research Core

Total Amount: \$29,993,056

Description: The goal of this project is to create a cradle-to-career continuum of support for the children who live or attend school in the Promise Neighborhood geographical footprint as well as their families and communities. The Data and Research Core, led by Drs. Amy Carroll-Scott and Felice LeScherban through the Drexel Urban Health Collaborative, leads all data and research components of the West Philadelphia Promise Neighborhood project.

230422 – 6915, Independence Blue Cross Blue Shield

(PI: Carroll-Scott) 11/2022-11/2023

Role: Co-Investigator

Project Title: Public Health Campus on Cedar Place-Based Evaluation

Total Amount: \$157,098

Description: To develop an evaluation plan for the placement of a new public health campus within an underserved population in Philadelphia, PA. The project leverages a cross-sectoral, collective impact approach to develop an innovative evaluation plan for the siting of the new location.

P30DK092950-Sub #8619, NIH/NIDDK

(PI: Haire-Joshu)

8/2016-9/2023

Role: Core Scientist

Project Title: Center for Diabetes Translation Research: Solutions to Diabetes in Black

Americans Core

Total Amount: \$674,165 (subaward)

Description: The goal of this core is to provide methodological and content expertise to advance the field of diabetes research in Black Americans through a partnership with the Council on Black Health, let by Dr. Shiriki Kumanyika. The overall goal of this center is to promote health equity in the prevention and control of type 2 diabetes; to address the root causes of diabetes and obesity; and to foster research collaborations, catalyze new ideas, and assist investigators conducting T3 and T4 translational research.

Pennsylvania Perinatal Partnership

(Co-PI: Shuster)

10/2019-6/2021

Breastfeeding Community Grant (#960131)

Role: Co-Principal Investigator

Project Title: Expanding and Integrating Peer Breastfeeding Support within the Newborns & Neighbors Community-Driven, In-Home Postpartum Peer Support Worker Pilot

Total Amount: \$14,912

Description: The goal of this project is to supplement an ongoing pilot to deliver peer support to mothers of color in Philadelphia with breastfeeding support and expanded access to support time provided to new moms. Through pairing postpartum peer support with breastfeeding support, the pilot will be better able to address low levels of breastfeeding and high risk of postpartum mental health challenges. Co-PI support is in kind. Due to COVID-19 research disruptions, a no cost extension until 6/2021 has been granted.

Peer Reviewed Publications

- 1. Xu Y, McClure L, Quick H, Jahn J, Zakeri I, **Headen I**, Tabb L. A Two-stage Bayesian Model for Assessing the Geography of Racialized Economic Segregation and Premature Mortality Across US Counties. Spatial and Spatio-temporal Epidemiology. (in press)
- Grobman, W. A., Entringer, S., Headen, I., Janevic, T., Kahn, R. S., Simhan, H., Yee, L. M., & Howell, E. A. Social determinants of health and obstetric outcomes: A report and recommendations of the workshop of the Society for Maternal-Fetal Medicine. American journal of obstetrics and gynecology. 2023;S0002-9378(23)00742-1. Advance online publication. https://doi.org/10.1016/j.ajog.2023.10.013
- 3. Schnake-Mahl A, Pomeranz J, Sun N, **Headen I**, O'Leary G, Jahn J. Forced Birth and No Time Off Work: Mapping Abortion Access and Paid Family Leave Policies. American Journal of Preventive Medicine. 2023;S0749-3797(23)00200-3. doi: 10.1016/j.amepre.2923.04.014
- 4. Dsouza N*, Carroll-Scott A, Bilal U, **Headen I**, Reis R, Martinez-Donate A. Investigating the measurement science of livability: a scoping review. Cities & Health. 2023;7(5):839-853. doi: 10.1080/23748834.2023.2202894
- 5. LeScherban F, **Headen I**, Klem AM, Traister K, Gilliam G, Beverly M, Jannetti M, Ferroni J, Carroll-Scott A. Research and evaluation in a child-focused place-based initiative: West Philly Promise Neighborhood. International Journal of Environmental Research and Public Health. 2023; 20(9):5716. https://doi.org/10.3390/ijerph20095716
- Stankov I, Henson RM, Headen I, Purtle J, Langellier B. The use of qualitative systems mapping and causal loop diagrams to understand food environments, diet and obesity: A scoping review protocol. BMJ Open. 2023;13:e066875. Doi:10.1136/bmjopen-2022-066875.
- 7. Grobman WA, Entringer S, **Headen I**, Janevic T, Kahn RS, Simhan H, Yee LM, Howell EA. Executive summary: Workshop on social determinants of health and obstetrical outcomes, February 1-2, 2022, cosponsored by the Society for Maternal-Fetal Medicine, the Commonwealth Foundation, and the Alliance for Innovation on Maternal Health, with support from the Society for Women's Health Research. Am J Obstet Gynecol. 2022 Dec 5; 228(3):B18-B24. doi: 10.1016/j.ajog.2022.12.001.
- 8. **Headen I**, Elovitz M, Battarbee A, Lo J, Debbink M. Racism and perinatal health inequities research: Where we have been and where we should go. American Journal of Obstetrics and Gynecology. 2022 May 18;S0002-9378(22)00377-5. doi: 10.1016/j.ajog.2022.05.033.
- 9. **Headen I**, Dubbin L, Canchola AJ, Kersten E, Yen IH. Health care utilization among women of reproductive age living in public housing: Associations across six public housing sites in San Francisco. Preventive Medicine Reports. 2022; 27:101797.
- Jannetti M, Carroll-Scott A, Headen I, Beverly M, LeScherban F. Improving Sampling Probability Definitions with Predictive Algorithms. Field Methods. 0(0). https://doi.org/10.1177/1525822X221113181
- 11. Schinasi LH, Kanungo C, Christman Z, Tabb LP, **Headen I**. Associations between historical redlining and present-day heat venerability housing and landcover characteristics in Philadelphia, PA. Journal of Urban Health. 2022; 99:134-145.
- 12. McCloskey L, Bernstein J, [and 68 others including **Headen I**]. Bridging the Chasm between Pregnancy and Women's Health over the Life Course: A National Agenda for Research and Action. Journal of Women's Health Issues. 2021;S1049-3867(21)00002-5.

- 13. Le-Scherban F, Moore J, **Headen I**, Utidjian L, Zhao Y, Forrest CB. Are there birth cohort effects in socioeconomic disparities in child obesity? International Journal of Obesity. 2020:1-10.
- 14. Strings S, **Headen I**, Spencer B. Yoga as a technology of femininity: Disciplining white women, disappearing people of color in Yoga Journal. Fat Studies. 2019;8(3):334-348.
- Headen I, Laraia B, Coleman-Phox K, Vieten C, Adler N, Epel E. Neighborhood Typology and Cardiometabolic Pregnancy Outcomes in the Maternal Adiposity Metabolism and Stress (MAMAS) Study. Obesity. 2019;27:166-173.
- 16. **Headen I**, Mujahid M, Deardorff J, Rehkopf D, Abrams B. Associations between cumulative neighborhood deprivation, long-term mobility trajectories, and gestational weight gain. Health and Place. 2018;52:101-109.
- 17. Obasogie OK, **Headen I**, Mujahid MS. Race, Law, and Health Disparities: Towards a Critical Race Intervention. Annual Review of Law and Social Science. 2017;13(1):313-329.
- 18. Abrams B, Coyle J, Cohen AK, **Headen I**, Ritchie L, Rehkopf D. Preventing excessive gestational weight gain could reduce maternal obesity at age 40: An analysis of a nationally representative sample. Am J Public Health. 2017; 107(9):1463-1469.
- 19. **Headen I**, Cohen AK, Mujahid M, Abrams B. The accuracy of self-reported, pregnancy-related weight: A Systematic Review. Obesity Reviews. 2017;18(3):350-369.
- 20. Rehkopf D, **Headen I**, Hubbard A, Deardorff J, Kesavan Y, Cohen AK, Patil D, Ritchie L, Abrams B. Adverse childhood experiences and later life adult obesity and smoking in the United States. Ann Epidemiol. 2016;26(7): 488-92.e5.
- 21. Cohen AK, Kazi C, **Headen I**, Rehkopf DH, Hendrick E, Patil D, Abrams B. Educational attainment and gestational weight gain among US mothers. Women's Health Issues.2016;26(4):460-467.
- 22. Ranchod Y, **Headen I**, Petitio LC, Deardorff JK, Rehkopf DH, Abrams BF. Maternal childhood adversity, prepregnancy obesity and gestational weight gain. Am J Prev Med. 2016;50(4):463-9.
- 23. **Headen I,** Mujahid MS, Cohen AK, Rehkopf DH, Abrams B. Racial/Ethnic Disparities in Inadequate Gestational Weight Gain Differ by Pre-pregnancy Weight. Maternal and Child Health Journal. 2015. 19(8):1672-86.
- 24. **Headen I**, Davis EM, Mujahid MS, Abrams BA. Racial-Ethnic Differences in Pregnancy-Related Weight. Advances in Nutrition. 2012 Jan;3(1)83-94.

Papers Under Review

Henson RM, Purtle J, **Headen I**, Stankov I, Langellier B. "Methods and Measures to Evaluate the Impact of Participatory Model Building on Public Policymakers: A Scoping Review Protocol." (submitted: BMJ Open)

Langellier BA, Argibay S, Henson RM, Kravitz C, Eastus A, Stankov I, **Headen I.** Participatory systems thinking to elucidate drivers of food access and diet disparities among an urban population. (submitted: Journal of Urban Health)

Shea L, Sadowsky M, Tao S, Rast J, Schendel D, Chesnokova A, Headen I. Perinatal and postpartum conditions among people with intellectual and developmental disabilities. (JAMA Open)

Papers in Preparation

Headen I and Kumanyika S. Incorporating Systems Thinking into the Getting to Health Equity Framework: Case Study Addressing Child Obesity in Philadelphia. (target journal: Health Equity)

Edwards J*, Ong C, **Headen I**, Barber S, Tabb L, Schinasi LH. Implications of Redlining Methods: A Systematic Review of Adverse Outcomes. (target journal: American Journal of Public Health)

Headen I, Gilani B, Branz M, Ballard E. System dynamics and structural racism: A scoping review. (target journal: Social Science and Medicine)

Headen I, O'Mara K*, Togo E*, Herring S. Residential Mobility as a Predictor of Gestational Weight Gain. (target journal: Journal of Urban Health)

Headen I. Structural Racism, Geographies of Opportunity, and Maternal Health Inequities: The need for System Science to Reimagine Translational Models. (target journal: Journal of Racial and Ethnic Health Disparities)

Duhaney S*, Pintor JK, Shuster S, Wells Q, Newman P, **Headen I.** Learning from mothers and birthing people of color about postpartum experiences during COVID: Informing peer support. (target Journal: Journal of Health Disparities Research and Practice)

Headen I, Ncube C, Bernstein J, McCloskey L. We need system science to transform agendas to action for racial health equity in maternity care. (target journal: Journal of Racial and Ethnic Health Disparities)

Briefs, Book Chapters, and Reports

Coaxum N, Headen I, Holland-Otunba PM, Nelson G, Davis I, Guman E. Investing in Black-led and Black-serving Community-based Maternal Health Organizations to Address Maternal Mortality in Philadelphia. 2023. The Organized Voices for Action (OVA): Birth Justice Philly. https://assets-global.website-

 $files.com/61fd829091b941092c07ec6d/65fb188e03b5ee2728679510_Community\%20Investment\%20report.pdf$

Headen I and Fowler L. Landscape Analysis of Black-led and Black-serving Maternal Health Organizations in Philadelphia. 2023.

Headen I. "The shortest distance is across not around: Bridging chasms in women's health care and racial justice to achieve maternal health equity." The Society Pages, Council on Contemporary Families, April 13, 2021, https://thesocietypages.org/ccf/2021/04/13/the-shortest-distance-is-across-not-around-bridging-chasms-in-womens-health-care-and-racial-justice-to-achieve-maternal-health-equity/.

Kuhlberg JA, **Headen I**, Ballard EA, Martin D. Advancing Community Engaged Approaches to Identifying Structural Drivers of Racial Bias in Health Diagnostic Algorithms. 2020. arXiv:2305.13485

Barber S, **Headen I**, Tabb L, Yadeta K. COVID-19 in Context: Racism, Segregation and Racial Inequities in Philadelphia: Drexel University Urban Health Collaborative; June 2020.

Conference Presentations

Headen I, Houston M, Delfino C. "Understanding Limits to Success in Equitable Investment Approaches for Black-led Community-Based Organizations" at the 41st Annual International Conference of the System Dynamics Society. Chicago, IL. July 23-27, 2023.

Coaxum N, **Headen I**, Nelson G, Holland-Otunba P, Davis I, Guman E, Mehta A. Understanding Investment in Black-led, Black-serving community-Based Maternal Health Organizations to Address Maternal Mortality in Philadelphia at the Annual Association of Maternal & Child Health Programs Conference. New Orleans, LA. May 6-9 2023.

Fowler L* and **Headen I**. "Facilitators, Barriers, and Limits to Growth for Black-led and Black Serving Community-Based Organizations." Black Maternal Health Conference and Training Institute hosted by Black Mamas Matter Alliance. Washington, DC. September 17-18, 2022.

Houston M and **Headen I.** "Opportunities to Improve Approaches to Diversity, Equity, and Inclusion." Parallel presentation at the 40th Annual System Dynamics Society. Frankfurt, Germany. July 18-22, 2022.

Headen I. "Discussant Reflections for 'Reducing Inequality Using System Dynamics." Invited Discussant for Plenary Presentation "How to Mainstream Diversity" at the 40th Annual International Conference of the System Dynamics Society. Frankfurt, Germany. July 18-22, 2022.

Headen I, Houston M, Fowler L*. "System Dynamics to Develop Sustainable investment Approaches for Black-led Maternal Health Community-based Organizations." Work in Progress presentation at the 40th Annual International Conference of the System Dynamics Society. Frankfurt, Germany. July 18-22, 2022.

Headen I, Branz M, Ballard E. "System Dynamics and Structural Racism: A Scoping Review." Parallel paper presentation at the 39th Annual International Conference of the System Dynamics Society. Virtual Presentation due to COVID-19 (original location: Chicago, IL, USA). July 25-30, 2021.

Headen I, Dubbin L, Canchola A, Kersten E, Yen I. "Housing type and preconception health care utilization: Baseline associations prior to public housing redevelopment in San Francisco." Poster presentation at the 33rd Annual Meeting of the Society for Pediatric and Perinatal Epidemiolgic Research (SPER). Boston, MA. December 15-16, 2020.

O'Mara K*, **Headen I**, Herring S. "Residential Mobility as a Predictor of Gestational Weight Gain." Poster presentation at The Obesity Society Annual Meeting held during ObesityWeek®. Virtual Conference (due to COVID-19). November 2-6, 2020.

Kuhlberg JA, **Headen I**, Ballard EA, Martin D. "Leveraging CBSD to Advance Community Engaged Approaches to Identifying Structural Drivers of Racial Bias in Health Diagnostic

Algorithms." Paper presentation at the 38th Annual International Conference of the System Dynamics Society. Virtual Presentation due to COVID-19 (original location: Bergen, Norway). July 19-23, 2020.

Headen I. "The role of cumulative perinatal risk in racial/ethnic in childhood obesity." Oral Presentation in Special Session: Using Electronic Health Record Data Linkage to Promote Health Equity at the 147th Annual Meeting of the American Public Health Association. Philadelphia, PA. November 2-6, 2019.

Headen I. "Big Data and Health Equity: Centering black data spaces to navigate promises and pitfalls." Oral Presentation in Data for Us by Us Breakout session at the Society for the Analysis of African American Public Health Issues Annual Meeting. Philadelphia, PA. November 2, 2019.

Headen I. "Systems Science to Inform Data (Creation) for Black Life." Panelist Contributor for Breakout Session I-Evidence Gathering-Going beyond describing the problems to identifying what works to accelerate progress for achieving health equity at the Council on Black Health: Forging the 2020 Agenda for Black Health: Translating Evidence into Action National Workshop. August 7-9, 2019

Headen I. "Data Linkage for Health Equity: Integrating Data to Better Understand Perinatal Risk and Racial/Ethnic Disparities in Childhood Obesity." Flash Presentation at the Rising Starts in Health Sciences: A Symposium for Underrepresented Minority Scholars. Bloomington, IN. July 16-18, 2019

Le-Scherban F, **Headen I**, Carroll-Scott A. "West Philadelphia Promise Neighborhood: Multisectoral Data Integration to Promote Child and Family Well-being." Poster presentation at the Interdisciplinary Association for Population Health Science. Washington, DC. October 3-5, 2018

Perera RC*, Brown EM, Laraia BA, Mujahid M, **Headen I**. "Associations between residential mobility and stress by age and race." Poster presentation at the 12th Annual UCSF Health Disparities Research Symposium. San Francisco, CA. October 12, 2018

Headen I, Laraia B. "Impact of neighborhood context on a stress-reduction intervention to improve weight-related pregnancy outcomes among high-risk pregnant women in the Maternal Adiposity Metabolism and Stress (MAMAS) study." Poster presentation at the 30th Annual Meeting of Society for Pediatric and Perinatal Epidemiologic Research. Seattle, WA. June 19-20, 2017

Headen I, Laraia B. "Understanding Supportive Neighborhood Environments for Pregnancy: An application of Latent Class Analysis." Poster and short oral presentation at the 29th Annual Meeting of Society for Pediatric and Perinatal Epidemiologic Research. Miami, FL. June 20-21, 2016

Headen I, Laraia B. "Understanding Supportive Neighborhood Environments for Pregnancy: An application of Latent Class Analysis." Poster presentation at UC Berkeley MCH Interdisciplinary Research Symposium. Berkeley, CA. March 15, 2016.

Headen I, Mujahid M, Abrams B. "Positive associations between in cumulative neighborhood deprivation and excessive gestational weight gain." Poster presentation at the 28th Annual

Meeting of the Society for Pediatric and Perinatal Epidemiologic Research. Denver, CO. June 15-16, 2015.

Headen I. "Racial Disparities in Gestational Weight Gain Modified by Pre-pregnancy Weight Status." Oral presentation at 140th Annual Meeting of the American Public Health Association. San Francisco, CA. October 27-31, 2012. *Denotes student advisee.

Invited Talks

"Structural Changes to Support Structural Determinants Research in Women's Health." Invited Presentation for Meeting 4 of the Committee on Assessment of NIH Research on Women's Health hosted by the National Academies of Science, Engineering, and Medicine. Washington, DC. April 11, 2024.

"Bucking the System: Designing Change for Black Maternal Health." Invited Talk for the 3rd Annual Black Maternal Health Summit hosted by Cocolife.Black. Enon Tabernacle Baptist Church, Philadelphia, PA. March 16, 2024.

"Population Trends in Maternal Morbidity and Mortality Inequities." Invited Presentation for the Health and Human Services Region 3 Maternal Health: A Regional Convening of Faith and Community Leaders and Health Professionals. Philadelphia, PA. November 15, 2023.

"Reimagining Research to Achieve Black Maternal Health." Invited Presentation for the Women's Resource Group and Multicultural Resource Group's Inequities in Maternal Health Series at the Children's Hospital of Philadelphia. Philadelphia, PA. February 8, 2023 (virtual)

"Embracing Complexity to Advance Understanding of Neighborhood Context and Racial Inequities in Maternal Health." Invited Presentation for the Health Equity Seminar Series of the Drexel Faculty Institutional Recruitment for Sustainable Transformation (FIRST) Initiative. Philadelphia, PA. January 19, 2023

"Participatory Systems Science Approaches for Health Equity." Invited Presentation for Building Our Skills in Systems Thinking and Mapping: Learning and Practicing Systems Thinking Workshop of the Partners for Advancing Health Equity Summit 2022. New Orleans, LA. December 4-6, 2022.

"Best practices in studying Social Determinants of Health." Invited Presentation for Workshop on Social Determinants of Health and Obstetric Outcomes organized as the Presidential Workshop for the 2022 Society for Maternal Fetal Medicine Conference. Orlando, Fl. February 1-2, 2022.

"Reimagining Research to Achieve Black Maternal Health." Invited Panelist for the "Scientific Evidence: What exists, where the gaps are, and why those gaps exist" Panel of the Reproductive Justice and Environmental Justice Convening co-hosted by Columbia University Mailman School of Public Health, Women with a Vision, and Sister Song. New Orleans, LA. December 10, 2021.

"Structural Racism & Maternal Health: Unpacking Systems of Inequity Towards Action." Invited Lecture at Rutgers University—Camden Health Sciences Center. October 12, 2021 (virtual).

"Leveraging Cross-Disciplinary Learning to Reimagine Research to Achieve Black Maternal Health." Panel Discussion for "Outcomes: Maternal and child Health" Panel at the 18th Annual Wiley A. Branton Symposium hosted by the Howard Law Journal. October 7, 2021.

"Comprehensive Approaches for Integrating Social and Structural Determinants of Health into Whole Person Research." Panel Discussion for "Methodological Approaches for Whole Person Research" Trans-NIH Symposium hosted by the National Center for Complementary and Integrative Health. September 29-30, 2021.

"The detours are the path: Reflections of a budding modeler on the road to building resilient relationships." Keynote Address for the Student Organized Colloquium at the 39th Annual International System Dynamics Conference. July 25, 2021.

Panelist for "Is there a Policy in the House? A Movement to Reduce Disparities in Maternal Health." Panel discussion hosted by the National Association of Health Services Executives-Greater Boston Chapter and Zeta Phi Beta Sorority, Inc-Omega Eta Zeta Chapter. May 13, 2021.

"The Power of...Reimagining Research to Achieve Black Maternal Health." Invited Panel Discussion for "The Power of Knowledge" Black Maternal Health Week Symposium hosted by Maternal Wellness Village. April 12, 2021.

"Racism and Perinatal Health: Approaches to Measurement." Invited Panel Discussion for the Race, Racism, and Perinatal Health: State of the Science Research Symposium for the Society for Maternal Fetal Medicine. January 19, 2021

"Multilevel contexts of weight gain during the childbearing window: Exploring the multidimensional role of neighborhood environment on intervention effectiveness." Invited Webinar for Council on Black Health-Center for Diabetes Translation Research/Solutions for Diabetes in Black Americans. December 10, 2020.

"Housing type and preconception health care utilization: Baseline associations prior to public housing redevelopment in San Francisco." Invited Webinar presentation for "Social and structural determinants of pregnancy health" hosted by the Society for Pediatric and Perinatal Epidemiologic Research. December 2, 2020.

"Race, Place, and COVID-19 Disparities: Structural Drivers of the Pandemic." Invited webinar for Caltech Y's Social Activism Speaker Series at Caltech Institute of Technology. November 19, 2020

"Public Housing, Redevelopment, and Preconception Health." Invited talk hosted by the Migration, Ethnicity, Race and Health Group (MERHG) at Drexel University Dornsife School of Public Health. November 6, 2020.

"Bridging the Chasm Between Pregnancy and Health over the Life Course." Invited talk copresented with Lois McCloskey, DrPH at National Maternal Health PCOR Network Symposium. Hosted by Health Resources in Action. Virtual Presentation. October 21, 2020.

"Embracing Complexity to Advance Understanding of Neighborhood Context and Racial Inequities in Maternal Health." Invited talk for Center for Obesity Research and Education

Speaker Series at Temple University College of Public Health. Virtual Presentation. October 20, 2020.

"Racism and Health: Evidence of an Ongoing Public Health Crisis." Invited talk for Isms in the Workplace: RACISM—A Public Health Crisis" invited speaker series hosted by Resources for Human Development. Virtual Presentation. June 24, 2020.

"COVID-19 and Black Folks: Racism as a Root Cause." Roundtable Presentation at Data for Black Lives Movement Roundtable on COVID-19. Virtual Convening. April 15, 2020.

"Structural Racism & Perinatal Health: Unpacking Systems of Inequity Toward Action." Keynote Speech at Advancing the Village: Addressing Disparities and Connecting the Dots in Maternal Mental Health Conference. Hosted by Philadelphia Community Action Network of Philadelphia Department of Public Health. Philadelphia, PA. March 6, 2020.

Teaching Experience

Drexel University

2023 Instructor

CHP 519: Methodology and Methods for Health Equity Research: The

Health of Black Communities. Online Course. Fall Quarter

2022 Instructor

CHP T580: Research Methods for Health Equity. Online Course. Fall

Quarter

2022 Co-Instructor

Introduction to Community Based System Dynamics, Short course in Drexel Urban Health Collaborative Summer Institute. June 27-July 1

2022 Instructor

CHP 560: Design and Grant Writing for Community Health Programs.

Spring Quarter

2019 Co-Instructor

Introduction to Community Based System Dynamics, Short course in Drexel Urban Health Collaborative Summer Institute. June 24-28

University of California Berkeley

Graduate Courses

2012 Graduate Student Instructor

Introduction to Epidemiologic Methods I (Public Health 250A)

Undergraduate Courses

2011, 2014-2015 Graduate Student Instructor

Introduction to Epidemiologic Methods and Scientific Writing, UC-HBCU Summer Research Program and Health Careers Opportunity Program

Guest Lectures

"Systems Thinking for Complex Problems: Applications to Research." Guest Lecture for Research and Analysis Methods, University of Puerto Rico Graduate School of Planning. April 25 and 29, 2024.

"Community-based System Dynamics Workshop Series: Parts 1-3." Short course for Partners for Advancing Health Equity, Tulane University School of Public Health and Tropical Medicine. September 27, October 25, November 29, 2023 (virtual).

"Data and Health Equity: Centering Black Data Spaces to Navigate Promises and Pitfalls." Guest Lecture for PPH 323: Health Equity, Northwestern Health Sciences Program. November 3, 2022 (virtual).

"Black Maternal Health in US: Challenges for Translating Research to Action." Guest Lecture for Global Issues in Maternal and Child Health (CHP 518) Drexel Dornsife School of Public Health. January 7, 2022 (recorded).

"Structural Racism & Maternal Health: Unpacking Systems of Inequity Towards Action." Guest Lecture for Public Health Foundations and Systems (PBHL 510) Drexel Dornsife School of Public Health. November 30, 2021; November 28, 2022; December 5, 2023.

"Place and Health: Concepts, Measurement, and Methods for Health Equity." Guest Lecture for Social Epidemiology (PB HLTH 255A) School of Public Health at University of California, Berkeley. April 19, 2021.

"Place and Health: Neighborhood Context and Racial Disparities in Maternal Health." Guest Lecture for Social Epidemiology (EPI 977). School of Public Health at Michigan State University. November 4, 2020

"Structural Racism and Perinatal Health." Guest Lecture for Maternal and Child Health Policy (HMP T580-940). Department of Health Management and Policy at Drexel University. Philadelphia, PA. February 19, 2020; February 11, 2021; March 2, 2022.

"Levels of Racism and Health: Epidemiologic Perspectives." Guest Lecture for Social Epidemiology (EPI T680). Department of Epidemiology and Biostatistics at Drexel University. Philadelphia, PA. October 17, 2019; October 14, 2021; and April 23, 2024.

"Pregnancy, Place, and Theory: A Social Epidemiologic Perspective." Guest Lecture for Sociology of Health and Illness (SOC235). Department of Sociology at Drexel University. Philadelphia, PA. January 22, 2019.

"Place, Health, and the Life Course: The Intergenerational Importance of Neighborhoods." Guest Lecture for Introduction to Public Health (NS 1600). Division of Nutritional Sciences at Cornell University. Ithaca, NY. September 17, 2018.

"Is Long-term Neighborhood Environment Associated with Weight Gain During Pregnancy?" Guest talk for Introduction to Epidemiology (HED 420). Division of Health Education at San Francisco State University. San Francisco, CA. May 3, 2017.

"Systematic Reviews in Public Health." Guest Lecture for Nutritional Epidemiology. Division of Public Health Nutrition at University of California, Berkeley. Berkeley, CA. March 7, 2017.

"Is Long-term Neighborhood Environment Associated with Weight Gain During Pregnancy?" Guest talk for Introduction to Epidemiology (HED 420). Division of Health Education at San Francisco State University. San Francisco, CA. November 2, 2016.

Additional Training and Professional Development

2022	5 th Annual International School of Decolonial Black Feminism, Cachoeira, Brazil (Reviewed and competitive selection; cancelled due to COVID-19)
2019	Systems Science for Social Impact Summer Training Institute, Brown School of Social Work at Washington University in St. Louis, July 29-August 2, St. Louis, MO (Reviewed and competitive selection)
2019	Rising Stars in Health Sciences: A Symposium for Underrepresented Minority Scholars, July 16-18, Indiana University-Bloomington, Bloomington, IN (Invitation to participate)
2017	ICPSR Summer Program in Quantitative Methods of Social Research, "Regression Analysis for Spatial Data", July17-21, Boulder, CO
2016	Robert Wood Johnson New Connections Research and Coaching Clinic Participant, Denver, CO (Reviewed and competitive selection)
2016	9 th Annual Black Europe Summer School, "Interrogating Citizenship Race and Ethnic Relations," Amsterdam, The Netherlands (Reviewed and competitive selection)

Professional Service

Professional Memberships:

Society for Epidemiologic Research (SER) Society for Pediatric and Perinatal Epidemiologic Research (SPER) Society for the Analysis of African-American Health Issues (SAAPHI) System Dynamics Society (SDS)

Journal Reviews:

American Journal of Clinical Nutrition
American Journal of Preventive Medicine
Maternal and Child Health Journal
Women's Health Issues
Environmental Health Perspectives
Diabetes, Obesity, and Metabolism
Obesity Reviews
Health & Place
Pediatric and Perinatal Epidemiology
American Journal of Perinatology
Social Science and Medicine-Population Health
Epidemiology
Preventive Medicine Reports
Obesity

Obstetrics & Gynecology (The Green Journal) System Dynamics Review

Grant Review:

Reviewer, NIH/Center for Scientific Review Study Section, Topics in Clinical Informatics and Data Analytics Special Emphasis Panel, December 4-5, 2023.

Reviewer, NIH/NIMHD Study Section, K01 Career Development Award Special Emphasis Review Panel, October 26-27, 2022.

Reviewer, RWJF, Interdisciplinary Research Leaders Program Review Panel, May 25-June 10, 2021

Reviewer, NIH/NIMHD Study Section, K01 Career Development Award Special Emphasis Review Panel, November 9-10, 2020.

Other Professional Service:

2025-27	Member at large, Policy council of the System Dynamics Society
2024	Discussant for "Inequality in Maternal Morbidity and Mortality" Session at the 2024 Annual Conference of the Population Association of America, Columbus, OH, April 20, 2024.
2024	Thread Co-chair for Diversity submission thread of the 42 st Annual International System Dynamics Conference, August 4-8, 2024
2023	Thread Co-chair for Diversity submission thread of the 41 st Annual International System Dynamics Conference, July 23-27, 2023
2022-26	Advisory Council, American Heart Association Health Equity Research Network Pregnancy and Postpartum/Postnatal (P³) Enhancing Access and QUAlity To Achieve Equitable Maternal and Infant Health (EQUATE) Coordinating Center at University of Alabama Birmingham
2022-26	Advisory Board, The Impacts of State Quality Care Collaboratives on Maternal Health Disparities by Race/Ethnicity, RAND Corporation (R01MD016892-01A1; PI: Peet)
2022-23	Steering Committee, <i>Obstetrics & Gynecology (Green Journal)</i> Special Issue on Racism and Reproductive Health
2022	Thread Co-chair for Diversity submission thread of the 40 th Annual International System Dynamics Conference, July 18-22, 2022
2022	Co-organizer, President's Workshop on Social Determinants of Health and Obstetric Outcomes, Society for Maternal Fetal Medicine Annual Conference, February 1-2, 2022
2021	Member, Racism, Race and Culture Working Group, Community Action Network, Philadelphia Department of Public Health

2021-	Member, Equity Advisory Board, Society for Pediatric and Perinatal Epidemiologic Research
2021	Technical Expert Advisor, Technical Expert Panel Identifying Measures of Need for Maternal Health Resources, facilitated by RAND Corporation in conjunction with Health Resources and Services Administration and the Assistant Secretary for Planning and Evaluation, June 3, 2021
2021-	Co-chair, Community Investment Implementation Team, The Organized Voices for Action, Philadelphia Department of Public Health
2021-	Member, Steering Committee, The Organized Voices for Action, Philadelphia Department of Public Health
2021	Member, Health Equity Advisory Committee, Philadelphia Department of Public Health
2020	Member, Refinement of Actionable Recommendations Advisory team to the Organizing Voices for Action Community Action Collective to Address Maternal Mortality in Philadelphia, Philadelphia Department of Public Health Maternal Child Family Health Division
2020-2024	Co-chair, System Dynamics Society Special Interest Group on Structural Racism
2019-2021	Member, Pennsylvania (PA) Perinatal Quality Collaborative (PQC) Advisory Committee and PA PQC Policy Sub-group on Maternity Value-Based Payment Models
2019-2021	Member, Outreach Committee, Society for Pediatric and Perinatal Epidemiologic Research
2019-2020	Member, Policy Working Group, Bridging the Chasm National Collaborative, Boston University
2018	Member, Postdoctoral Association Executive Board and National Postdoctoral Appreciation Week Planning committee, Drexel University
2017-2019	Founder and Lead Organizer of Postdoc Peer Mentoring Group, Drexel University, Dornsife School of Public Health
School Servi 2022-	ice: Member, MPH Admissions Committee, Dornsife School of Public Health, Drexel University
2022-23	Junior Faculty Advisory Group, Dornsife Initiative to Transform Academia for Equity (PI: Bellamy and Moore; RWJF)
2021-	Member, Strategic Council, Ubuntu Center on Racism, Global Movements & Population Health Equity, Dornsife School of Public Health, Drexel University

2021- Peer Mentor, Catalyzing Systemic Change at Drexel University to Support

Diverse Faculty in Health Disparities Research (NIH Faculty Institutional

Recruitment for Sustainable Transformation (FIRST) Award, U54CA267735; Pls:

Diez-Roux, Gitlin)

2020-2021 Member, Center for Study of Racism and Health Planning Committee (Ubuntu

Center), Drexel University Dornsife School of Public Health

Departmental Service:

2023-	Departmental Committee on Research
2021-	Departmental Awards Committee Member
2021-	Faculty Advisor, CHP Club

2021-22 Search Committee member for Department Chair position 2020 Search Committee member for Business Manager Position

Other Service:

2020-2022 Advisory Board Member, Race to Better Health

2019 Co-Facilitator, System Dynamics Workshop (Google Sponsored), Data for Black

Lives Conference II at the MIT Media Lab, Cambridge, MA. January 11-13, 2019.

PhD/DrPH Advising:

Student Name	Department	Advising Role	Years
Grace Mahasi	Community Health and Prevention	Chair	2022-
Patrick Smith	Community Health and Prevention	Committee Member	2022-
Janelle Edwards	Environment & Occupational Health	Committee Member	2022-
Tiffany Bryan	Community Health and Prevention	Committee Member	2020-
Yang Xu	Epidemiology & Biostatistics	Committee Member	2022-2024
Amie Devlin	Epidemiology & Biostatistics	Committee Member	2020-2022
Nishita Dsouza	Community Health and Prevention	Committee Member	2019-2022

MPH Advising:

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Student Name	Department	Advising Role	Years
Heather Ramey	Community Health and Prevention	Advisor	2023-
Megan Gupta	Community Health and Prevention	Advisor	2022-2024
Ally D'Angelo	Community Health and Prevention	Advisor	2022-2024
Luna Urena	Urban Health	Advisor	2021-2024
Rachel Berger	Urban Health	Advisor	2021-2024
Chanel Conigan	Global Health	ILE Advisor	2022-2023
Nada Ali	Health Management & Policy	ILE Advisor	2021-2022
Lawryn Fowler	Community Health and Prevention	ILE Advisor	2021-2022
Michelle Obasi	Community Health and Prevention	Advisor	2020-2022
DeAnjur Coney	Global Health	Advisor	2020-2022
Erin Stonesifer	Global Health	Advisor	2020-2022
Kokui Elikem Togo	Community Health and Prevention	Advisor	2019-2021
Mary Glazer	Community Health and Prevention	Advisor	2019-2021
Briana Guillory	Community Health and Prevention	ILE Advisor	2019-2020
Kyle O'Mara	(external-Temple University)	Thesis Co-Advisor	2019-2020