<u>Suggested readings for</u>: Krieger N. From embodying gendered injustice to advancing gender transformative intersectional science: an ecosocial proposal. Invited plenary presentation for virtual NIH Workshop "Gender and Health: Impacts of Structural Sexism, Gender Norms, Relational Power Dynamics, and Gender Inequities," sponsored by the NIH Office of Women's Health Research. October 26, 2022.

## Ecosocial theory, embodied histories, populations, & health inequities

- Krieger N. Ecosocial Theory, Embodied Truths, and the People's Health. New York: Oxford University Press, 2021.
- Krieger N. Epidemiology and the People's Health: Theory and Context. New York: Oxford University Press, 2011.
- Krieger N. Epidemiology and the web of causation: has anyone seen the spider? Soc Sci Med 1994; 39:887-903.
- Krieger N. Theories for social epidemiology in the 21st century: an ecosocial perspective. *Int J Epidemiol* 2001; 30:667-677.
- Krieger N. Got theory? on the 21<sup>st</sup> c CE rise of explicit use of epidemiologic theories of disease distribution: a review and ecosocial analysis. *Current Epidemiol Reports* 2014;1(1):45-56.
- Krieger N. Embodiment: a conceptual glossary for epidemiology. J Epidemiol Community Health 2005; 59:350-355.
- Krieger N. Who and what is a "population?' Historical debates, current controversies, and implications for understanding "population health" and rectifying health inequities. *Milbank Quarterly* 2012; 90:634-681.
- Krieger N. The real ecological fallacy: epidemiology and global climate change. J Epidemiol Community Health. 2015; 69(8):803-4.
- Krieger N. History, biology, and health inequities: emergent embodied phenotypes & the illustrative case of the breast cancer estrogen receptor. Am J Public Health 2013; 103:22-27.
- Krieger N. Inheritance and health: what really matters? Am J Public Health 2018; 108(5):606-607.

## Concepts and methods for analyzing relationships between structural injustice, discrimination, & health

- Krieger N. Genders, sexes, and health: what are the connections and why do they matter? Int J Epidemiol 2003; 32(4);652-657.
- Krieger N. Structural racism, health inequities, and the two-edged sword of data: structural problems require structural solutions. Frontiers Public Health 2021; 9:301; https://doi.org/10.3389/fpugh.2021.655447
- Krieger N. From structural injustice to embodied harm: measuring racism, sexism, heterosexism, and gender binarism for health equity studies. Annu Rev Public Health 2020; 41;37-62. <a href="https://www.annualreviews.org/doi/pdf/10.1146/annurev-publhealth-040119-094017">https://www.annualreviews.org/doi/pdf/10.1146/annurev-publhealth-040119-094017</a>
- Krieger N. ENOUGH: COVID-19, structural racism, police brutality, plutocracy, climate change and time for health justice, democratic governance, & an equitable sustainable future. Am J Public Health 2020; 110(11):1620-1623.
- Krieger N. Discrimination and health inequities. In: Berkman LF, Kawachi I, Glymour M (eds). Social Epidemiology. 2<sup>nd</sup> ed. New York: Oxford University Press, 2014; 63-125.
- Krieger N. Methods for the scientific study of discrimination and health: from societal injustice to embodied inequality an ecosocial approach. *Am J Public Health* 2012; 102:936-945.
- Krieger N. Breaking through and backlash: advancing awareness about racism, sexism, social class, and the people's health. Am J Prev Med 2022; 62(6):807-813.
- Krieger N, Rowley DL, Herman AA, Avery B, Phillips MT. Reprint of: Racism, sexism, and social class: Implications for studies of health, disease and well-being. Am J Prev Med 2022; 62(6):816-863. Reprinted from: Am J Prev Med 1993; 9(6 suppl):82-122.

#### Global & US context (overall & by gender)

- "Worldmapper: Mapping Your World as You've Never Seen it Before" original: <a href="http://www.worldmapper.org/">http://www.worldmapper.org/</a>; new: <a href="http://www.worldmapper.limited/">http://www.worldmapper.limited/</a>
- Oxfam. Profiting from Pain. May 2022. https://www.oxfam.org/en/research/profiting-pain
- Inequality.org. Wealth inequality in the United States, 2022. https://inequality.org/facts/wealth-inequality/
- UN Women. The World's Women 2020 Trends and Statistics, https://worlds-women-2020-data-undesa.hub.arcgis.com/
- Inequality.org. Gender economic inequality. 2022. <a href="https://inequality.org/facts/gender-inequality/">https://inequality.org/facts/gender-inequality/</a>
- National Women's Law Center. Poverty rates for adult women, 2019. <a href="https://nwlc.org/wp-content/uploads/2020/12/PovertySnapshot2020.pdf">https://nwlc.org/wp-content/uploads/2020/12/PovertySnapshot2020.pdf</a>
- US Household Pulse Survey, Week 48 (July 27-August 8, 2022). https://www.census.gov/data/tables/2022/demo/hhp/hhp48.html
- Georgetown Institute for Women, Peace, and Security. https://giwps.georgetown.edu/the-index/

# Empirical examples (I): Worlds of Work

- Krieger N. Workers are people too: societal aspects of occupational health disparities--an ecosocial perspective. Am J Ind Med 2010; 53(2):104-115.
- Krieger N, Chen JT, Waterman PD, Hartman C, Stoddard AM, Quinn MM, Sorensen G, Barbeau EM. The inverse hazard law: blood pressure, sexual harassment, racial discrimination, workplace abuse and occupational exposures in US lowincome black, white and Latino workers. Soc Sci Med 2008; 67(12):1970-1981.
- Thurston RC, Chang Y, Matthews KA, von Känel R, Koenen K. Association of sexual harassment and sexual assault with midlife women's mental and physical health. JAMA Intern Med 2019; 179(1):48-53.
- Jiménez-Mérida MR, Romero-Saldaña M, Molina-Luque R, Molina-Recio G, Meneses-Monroy A, De Diego-Cordero R,

- Vaquero-Abellán M. Women-centred workplace health promotion interventions: a systematic review. *Int Nurs Rev* 2021; 68(1):90-98.
- Pearson J, Shannon K, McBride B, Krüsi A, Machat S, Braschel M, Goldenberg S. Sex work community participation in criminalized environments: a community-based cohort study of occupational health impacts in Vancouver, Canada: 2010-2019. Int J Equity Health 2022; 21(1):18. doi: 10.1186/s12939-022-01621-8.

#### Empirical examples (II): Ecologic Environs

- West BS, Hirsch JS, El-Sadr W. HIV and H<sub>2</sub>0: tracing the connections between gender, water, and HIV. AIDS Behav 2013; 17:1675-1682.
- Kayser GL, Rao N, Jose R, Raj A. Water, sanitation and hygiene: measuring gender equality and empowerment. Bull World Health Organ 2019; 97(6):438-440.
- Krieger N. Ecosocial Theory, Embodied Truths, and the People's Health. New York: Oxford University Press, 2021. [Fracking example: pp. 151-154]
- Komarek T, Cseh A. Fracking and public health: Evidence from gonorrhea incidence in the Marcellus Shale region. J Public Health Policy 2017; 38(4):464-481.
- Grisafi L. Living in the blast zone: Sexual violence piped onto native land by extractive industries. Colum JL & Soc Probs 2019; 53:509-539.

## Empirical examples (III): Sexual Reproduction & Reproductive Justice

- Herschberger R. Adam's Rib. New York: Pellegrini & Cudahy, 1948.
- Martin E. The egg and the sperm: how science has constructed a romance based on stereotypical male-female roles. Signs 1991; 16:485-501.
- Ophir AG, Phelps SM, Sorin AB, Wolff JO. Social but not genetic monogamy is associated with greater breeding success in prairie voles. Animal Behaviour 2008; 75(3):1143-1154.
- Stern AM, Novak NL, Lira N, O'Connor K, Harlow S, Kardia S. California's sterilization survivors: an estimate and call for redress. Am J Public Health 2017; 107(1):50-54.
- Lenharo M. After Roe v. Wade: US researchers warn of what's to come. Nature 2022; 607:15-16.
- Sister Song. Women of Color Reproductive Justice Collective. <a href="https://www.sistersong.net/reproductive-justice">https://www.sistersong.net/reproductive-justice</a>

#### Empirical examples (IV): Gender transformative work

- Jewkes R, Flood M, Lang J. From work with men and boys to changes of social norms and reduction of inequities in gender relations: a conceptual shift in prevention of violence against women and girls. *Lancet* 2015; 385(9977):1580-1589.
- Fleming PJ, Gruskin S, Rojo F, Dworkin SL. Men's violence against women and men are inter-related: Recommendations for simultaneous intervention. *Soc Sci Med* 2015; 146:249-256.
- Fisher J, Makleff S. Advances in gender-transformative approaches to health promotion. *Annu Rev Public Health* 2022; 43:1-17.
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  targeting gender inequality and restrictive gender norms for the health and wellbeing of children, adolescents, and young
  adults: a systematic review. Lancet Glob Health 2020; 8(2):e225-e236.

# Linking past & current injustice: biology, gender, Jim Crow & historical redlining

- Krieger N, Chen JT, Coull B, Waterman PD, Beckfield J. The unique impact of abolition of Jim Crow laws on reducing health inequities in infant death rates and implications for choice of comparison groups in analyzing societal determinants of health. *Am J Public Health* 2013; 103:2234-2244.
- Krieger N, Chen JT, Coull BA, Beckfield J, Kiang MV, Waterman PD. Jim Crow and age-period-cohort analysis of premature mortality among the US black and white population, 1960-2009. *Epidemiology* 2014; 25:494-504.
- Krieger N, Jahn JL, Waterman PD. Jim Crow and estrogen-receptor negative breast cancer: US-born black & white non-Hispanic women, 1992-2012. Cancer Causes Control 2017; 28:49-59.
- Krieger N, Jahn JL, Waterman PD, Chen JT. Breast cancer estrogen receptor by biological generation: US black & white women, born 1915-1979. Am J Epidemiol 2018; 187:960-970.
- Krieger N, Van Wye G, Huynh M, Waterman PD, Maduro G, Li W, Gwynn C, Barbot O, Bassett MT. Historical redlining, structural racism, and preterm birth risk in New York City (2013-2017). Am J Public Health 2020; 110(7):1046-1053.
- Krieger N, Wright E, Chen JT, Waterman PD, Huntley ER, Arcaya M. Cancer stage at diagnosis, historical redlining, and current neighborhood characteristics: breast, cervical, lung, and colorectal cancer, Massachusetts, 2001-2015. Am J Epidemiol 2020; 189(10):1065-1075.
- Wright E, Waterman PD, Testa C, Chen JT, Krieger N. Breast cancer incidence, hormone receptor status, historical redlining, and current neighborhood characteristics in Massachusetts, 2005-2015. *JNCI Cancer Spectrum* 2022; 6(2); https://doi.org/10.1093/jncics/pkac016; epub on-line: Feb 18, 2022.
- Lopez M, Rothstein R, YouTooCanWoo. Segregated by Design. (documentary video). April 2019. https://www.segregatedbydesign.com/