# Tiny Black Lives Matter: Exploring Ways to Disrupt the Pathway Between Racism and Adverse Birth Outcomes

The pathways between racism, the social determinants of health and birth outcomes have contributed to pervasive racial and ethnic disparities in maternal and child health. I will explore ways to disrupt this pathway by discussing the health care professional’s role in dismantling structural racism; diversifying the doula work force; and the provision of culturally-centered prenatal care.

Dr. Rachel Hardeman is a health equity researcher with a focus on the role of the clinician, health care delivery systems and the policy environment in reducing disparities in outcomes and quality of health care. Her research examines the ways in which aspects of race (e.g. implicit and explicit bias, discrimination, structural racism and the white racial frame) affect health care delivery, the clinician-patient encounter and health outcomes. She has a particular interest and focus on prenatal care delivery and persistent disparate birth outcomes for Black women.

Opportunity Cost of Non-Rigorous & Non-Transferable Research: Implications for Cost-Effectiveness Analysis

Evidence used in cost-effectiveness analysis (CEA) is often obtained from empirical studies, which may not be rigorous or directly relevant to the CEA’s setting. Fernando Alarid Escudero, in conjunction with colleagues from Brown University and University of Pittsburgh have proposed an approach to quantify the opportunity cost of biased research. In this session, Alarid-Escudero will demonstrate their approach applied to a CEA that informed antenatal care policies in the United Kingdom.

Fernando Alarid Escudero, is a PhD candidate and a Fulbright scholar at the University of Minnesota School of Public Health, Division of Health Policy and Management.
The Milk of Paradise? Maternal Obesity, Breast Milk Quality, and Infant Growth

Pre-pregnancy obesity is increasing in the United States and there is a known link between maternal obesity during pregnancy and increased obesity risk in children. In this session, Dr. Ellen Demerath will discuss new data from her NIH-funded study on the understudied relationship of maternal obesity with breastmilk quality and quantity and its potential impacts on infant growth.

Dr. Ellen Demerath’s research focuses on the developmental origins of early life risk factors for chronic disease, with an emphasis on obesity, body composition, and cardiovascular disease risk factors in infancy and childhood.

Got Milk: Potential Physiological Factors Influencing Low Breastmilk Supply in Obese Mothers

It has been well established that obese mothers breastfeed their infants for a shorter period of time than normal weight mothers. This is a public health issue because maternal obesity is highly prevalent and breastfeeding for at least six months provides numerous health benefits to the growing child. Obese mothers report low milk supply as one of the main reasons for ending breastfeeding early, but lactation experts typically assume that this perception is rooted more in behavior (e.g., early supplementation with formula leading to lower milk supply) than in lower physiological capacity to produce milk. In this talk, Regina Marino will use data from the MILK study (Dr. Ellen Demerath) of exclusively breastfeeding women to show that maternal obesity, and higher pregnancy glycemia, are associated with lower milk supply. These results will be discussed in light of the existing literature, mostly from animal studies.

Regina Marino, is a MS student at the University of Minnesota School of Public Health, Division of Epidemiology and Community Health.
The Role of Biostatistics in Tobacco Regulatory Science

Smoking remains the leading cause of preventable death in the United States and is responsible for 480,000 deaths annually. In 2009, Congress passed the Family Smoking Prevention and Tobacco Control Act, which gave the FDA the authority to regulate the content, marketing, and sale of tobacco products. Over the last eight years, tobacco regulatory scientists have devoted substantial time and energy to investigate potential regulatory strategies and their impact on public health. In this talk, Dr. Koopmeiners will discuss the role that statistical methods research plays in identifying regulatory strategies that will have the biggest impact on public health.

Dr. Joseph Koopmeiners is an associate professor in the Division of Biostatistics and faculty statistician in the Biostatistics and Bioinformatics Core of the Masonic Cancer Center. He received his PhD in biostatistics from the University of Washington in 2009. His research interests include Bayesian methods for clinical trials with applications to cancer treatment and prevention and the statistical validation of biomarkers for cancer diagnosis and prognosis.

Estimating the Causal Effect of Nicotine Reduction on Cigarette Use and Dependence

Nicotine reduction has been proposed as a regulatory strategy to limit the public health impact of smoking. In a recent randomized clinical trial, participants assigned to smoke very low nicotine content (VLNC) cigarettes smoked fewer cigarettes per day than participants smoking their usual brand. Interpreting these results is challenging because many participants in the VLNC arm continued to smoke some usual brand cigarettes. In this session, Jeffrey Boatman will describe a novel statistical approach for estimating the effect of VLNC cigarettes on smoking if participants were to smoke only VLNC cigarettes that uses biomarkers of nicotine exposure to identify subjects that complied with the intervention.

Jeffrey Boatman is a PhD candidate at the University of Minnesota School of Public Health, Division of Biostatistics. His research interests include causal inference, clinical trials, and statistical computing.
Podium Presentation Descriptions

Podium Presentations Concurrent Session 2
Division of Environmental Health Sciences

**Ticked Off: Public Health Entomology in the Upper Midwest**

Dr. Jonathan Oliver is an entomologist and vector borne disease specialist who studies the interaction of pathogenic bacteria with their arthropod vectors. The diseases and vectors being studied by Dr. Oliver are of particular public health importance in Minnesota and throughout the world.

Jonathan Oliver, PhD
Assistant Professor, Division of Environmental Health Sciences

**Examining Effects of Food Safety Cultural Norms on Food Inspections: The Case for Somali Restaurateurs**

Researchers have increasingly found food safety concerns with ethnic-owned restaurants yet ethnic food consumption is on the rise. The earliest Somali immigrants to the Twin Cities is now approaching 20 years residency, with the earliest food establishments operated and owned by Somalis also approaching 20 years in business. In this session, Farah will discuss her study that analyzes food safety cultural norms data obtained from focus group studies that mapped out these norms against food safety laws and examined the relationship between these cultural norms with inspections by looking at seven years of violation data from 62 independently owned and operated Somali restaurants. She will also share the proposed policy recommendations aimed at overcoming these challenges.

Farhiya M. Farah is a PhD candidate at the University of Minnesota School of Public Health, Division of Environmental Health Sciences. She is also the head and founder of GlobeGlow Consulting and Research, Inc. which focuses on applied environmental health projects and community based participatory research work. Farah received her Masters of Public Health from University of Minnesota and passionately promotes health equity and inclusivity in public health policies and practices.