



UNIVERSITY OF DELAWARE  
**DATA SCIENCE  
INSTITUTE**



UNIVERSITY OF DELAWARE  
**ENGINEERING**

## CENTER FOR BIOINFORMATICS & COMPUTATIONAL BIOLOGY and the DATA SCIENCE INSTITUTE (DSI)



### **PRESENTS:** **Deborah Ehrental**

Associate Professor, University of Wisconsin

#### **MINING THE “DATA LANDFILL”: LINKING MULTISOURCE ADMINISTRATIVE DATA TO STUDY THE HEALTH OF WOMEN AND THEIR CHILDREN**

Women who are poor, less educated, African American, Native American, or who live in rural settings, are more likely to experience an adverse birth outcome, a severe maternal morbidity, or deliver a low birth weight infant. Beyond birth outcomes, the long-term effects of adverse events in pregnancy and during early childhood make this a key period when interventions may have great preventive impact on long-term health and chronic disease. Studies of individuals at a population level are critically needed to understand the individual, health care and community factors influencing health in order to guide policy. In this presentation I discuss the development of Big Data for Little Kids (BD4LK), a multi-source administrative data resource linked at the individual level to create a large longitudinal cohort of all mothers and their children were born in Wisconsin. BD4LK spans the prenatal period and the first decade of a child’s life, and captures behaviors, experiences, and outcomes, while controlling for an extensive range of individual and geographic factors. I present findings related to the evaluation of prenatal care coordination, a Medicaid benefit delivered during the prenatal period, and also use these data to examine factors that moderate the link between preterm birth and school achievement. Finally, I present planned future studies designed to provide new insights into the current opioid epidemic.

#### **BIOGRAPHY**

Deborah Ehrental, MD, MPH, is Associate Professor at the University of Wisconsin School of Medicine and Public Health. She attended the University of Massachusetts Medical School, completed her internship and residency training in General Internal Medicine at Yale-New Haven Hospital, and received an MPH from the Johns Hopkins Bloomberg School of Public Health. She was recruited to the University of Wisconsin-Madison in 2014, where she is currently director of the new Division of Reproductive and Population Health in the Department of Obstetrics & Gynecology and holds a joint appointment in the Department of Population Health Sciences. Her research focuses on the health of women and children over the life course. She is the PI of the Health Disparities Research Scholars (T32) Postdoctoral Training Program, funded by the Eunice Kennedy Shriver National Institute of Child Health and Human Development. In addition, she is the PI/Director of the \*new\* University of Wisconsin-Madison Prevention Research Center, one of 25 academic institutions to receive five-years (2019 – 2024) of funding from the Centers for Disease Control and Prevention to develop and maintain a Prevention Research Center. The goal of this new center is to improve the health of low-income women, infants, and families by conducting health promotion and disease prevention research focused on maternal, infant, and child health.

### **SEMINAR INFO**

**October 21, 2019**

**DELAWARE  
BIOTECHNOLOGY  
INSTITUTE  
Room 102**

**3:30 – 4:30pm**