“Environmental Health Disparities: Susceptible Populations”

Carrie Van Breton, ScD, MPH
Assistant Professor of Preventive Medicine
Keck School of Medicine, University of Southern California

Dr. Carrie Van Breton is an alumna of the Chan School and trained in environmental health, epidemiologic methods and epigenetics. Her current research evaluates prenatal air pollution and prenatal tobacco smoke exposures as risk factors for cardio-respiratory health in children and young adults. She has conducted research focused on examining the interplay between genetic susceptibility and air pollutant exposures on lung function using data from cohorts of children in the USC Children’s Health Study (CHS). Using CHS data, she found that polymorphisms in genes involved in glutathione synthesis and oxidative stress can affect lung function growth in children, and can potentially interact with environmental exposures such as prenatal tobacco smoke exposure or air pollution. As an assistant professor and the principal investigator of an NIEHS K01 award, she have laid the foundation for future research into the relationships between prenatal exposures to air pollution, epigenetic changes, and thickening of the arterial walls, an early marker of atherosclerosis. She has also explored the associations between air pollution and prenatal tobacco smoke exposure on changes in epigenetic marks such as DNA methylation and its association with cardiopulmonary health outcomes in children.

Questions? Call (617.432.1270) or email (awilcox@hsph.harvard.edu) Alissa in the EH Dept. Office.