JUNIOR CHUANG, University of Toronto

Impact of Ultra-Fine Particles on Childhood Development of Lung Functions, Results from Canadian Healthy Infant Longitudinal Development (CHILD) Study

Many publications have shown the adverse effects of air pollution on lung development of young children. However, the particular topic of ultra-fine particles and its association with the development of lung function in children is still not fully understood. Using Land-Use Regression and mixed models as a point of departure, the Toronto cohort from the Canadian Healthy Infant Longitudinal Development Study was combined with ultra-fine particle data over the period of 2009-2013 to identify and describe both acute and longitudinal effects of ultra-fine particles on children.