Department of Biostatistics and Medical Informatics Seminar

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Friday, April 1, 2022
12:00-1:00 pm
Via Zoom:
https://uwmadison.zoom.us/j/93714512952?pwd=cEcyczlhSVp5T0NETTIyRUJxa1dZdz09

Integrating Multimodal Data to Identify Differences in Farm and Nonfarm Cohorts in Early Childhood

Abstract: The inception of immune mediated disorders, which have increased worldwide, typically occurs during early childhood and leads to chronic and lifelong diseases. Recent reports show that children exposed to microbes from pets or farm animals, or from traditional communities such as the Amish, have low and lower rates respectively, of allergic and immune related diseases. The infant gut microbiome, particularly during the first 100 days of life, influences development of neonatal immunity, however, the precise microbes and composition that differentiate remain unknown. We compared stool microbiomes from Wisconsin infants from three levels of farm-related lifestyles: traditionally farming Amish, rural farming, and rural non-farming. We hypothesized that the gut microbiota communities of the groups would vary with the level of farming exposures, and that the Amish cohort would harbor unique microbes compared to the non-Amish infants.

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