

**University of California, Irvine  
Statistics Seminar**

***Statistical Methods to Accommodate Population Diversity  
in Large Cohort Studies***

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**4 p.m., Thursday, March 11, 2021**

**Join via Zoom: <https://uci.zoom.us/j/91370133600>**

In diverse populations, dimension reduction methods may become inadequate when a major demographic group overpowers and masks pattern details of smaller sized demographic groups. This becomes of concern in large population-based studies, when minority populations are overshadowed, and population effect differences are not properly identified or evaluated. Dietary intake is a modifiable risk factor of cardiometabolic disease that varies by culture and geographic region in the United States. This observation is underscored in the US Hispanic/Latino population, which are both ethnically and culturally diverse. Using dietary consumption data collected in large population cohort studies, we demonstrate how flexible statistical methods can be used to jointly identify dietary patterns in various demographics and subpopulations of the United States. We also will discuss how these differences in dietary exposure patterns contribute to differences in cardiovascular health outcomes.