

The Math/Stats Colloquium Department of Mathematics and Statistics San José State University





Zehang (Richard) Li

UC Santa Cruz

Measuring the hidden burden of disease: Cause of death assignment using verbal autopsy WED NOV 30, 2022, MH320

**Abstract:** Verbal autopsy (VA) is a survey-based tool for assigning a cause to deaths when traditional autopsy and cause certification are not available. It has been routinely used for mortality surveillance in low-resource settings. In the last decade, several statistical and machine learning methods for inferring cause of death using VA data have been developed. We will discuss several Bayesian approaches to assign causes of death and estimate population-level cause-specific mortality fractions. We will also discuss the challenges with generalizability of such algorithms across different populations.

Background: One class in statistics.

About the speaker: Zehang (Richard) Li received his Ph.D. from University of Washington and is now an Assistant Profession in the Department of Statistics at UC Santa Cruz. His research involves the development of statistical methods for global and public health. He is particularly interested in latent variable models, space-time models, causal inference, and applications in health data science.

SNACKS SERVED OUTSIDE BETWEEN MACQUARRIE HALL AND SWEENEY HALL AT 2:40PM (WEATHER PERMITTING) TALK STARTS AT 3:00PM

For more information, see our full schedule at:

http://www.timhsu.net/colloq/