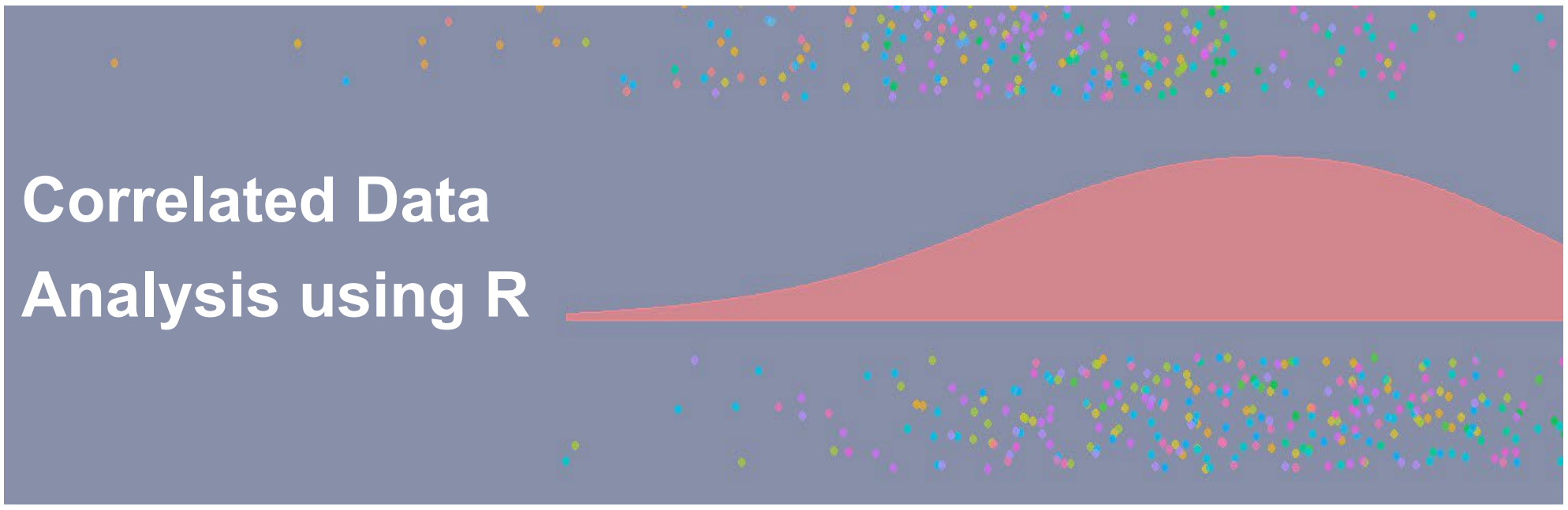
SORA-TABA Annual Workshop & DLSPH Biostatistics Research Day



Monday
May 13th, 2024
9:00am – 5:00pm

Dalla Lana School of Public Health
University of Toronto
155 College Street, Toronto
Virtual Attendance Option Available

Aya A. Mitani, PhD

Assistant Professor, University of Toronto, Division of Biostatistics

Abstract: Correlated data are commonly encountered in both observational and experimental studies. The key feature of correlated data is the repeated measurement of the same variable within each individual or group. These measurements are typically correlated within the same individual or group, and the analysis of such data must consider the possible correlation. In this workshop, I will provide an overview of methods including marginal models and mixed effects models for both continuous and categorical responses. I will also go over ways to handle dropout in longitudinal studies. We will use the R statistical programming language for all examples. Participants should have familiarity with R and a basic statistical background that includes a good understanding of linear and generalized linear models.

Program:

1) **Module 1: Introduction, visualization, and general linear models**
   a. Motivating examples
   b. Data visualization
   c. General linear model
2) **Module 2: Marginal models**
   a. Review of generalized linear models
   b. Generalized estimating equations
3) **Module 3: Mixed effects models**
   a. Linear mixed effects models
   b. Generalized linear mixed effects models
4) **Module 4: Missing data and dropout in longitudinal studies**
   a. Inverse probability censoring weights
   b. Joint modeling of longitudinal and survival data

Speaker Bio: Dr. Aya A. Mitani is Assistant Professor in the Division of Biostatistics at the Dalla Lana School of Public Health (DLSPH), University of Toronto. Her research focuses on developing statistical methods to analyze correlated data and to remove biases that emerge from informative cluster size, study design, missing data, or misclassification in multilevel observational studies and complex surveys. She has collaborated with researchers from oncology, nephrology, anesthesiology, and oral health. Aya teaches "Analysis of Correlated Data" at DLSPH.

Please Register @ Eventbrite: 2024 SORA-TABA Annual Workshop & DLSPH Biostatistics Research Day

A career panel will be held during the lunch break.

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