



# Latent Class Analysis

Latent class models are a powerful, flexible approach to finding and describing otherwise hidden and unknown subpopulations. They can provide key insights for etiology discovery and patient-oriented treatment when “one size” models are inadequate. Advances in statistical methodology and computational power have made it a viable tool of growing popularity. Applications include topics such as market segmentation, gambling and substance abuse risks, clinical depression, and emergency medicine.

**October 29 & 30, 2018 • 9:00 am - 12:00 pm**

Rm 207 Chown Building, 753 McDermot Ave, University of Manitoba, Bannatyne Campus

## Learning Objectives

- » Provide an introduction to latent class analysis from an applied perspective.
- » Demonstrate the PROC LCA routine in SAS and related R packages.

By the end of the workshop, participants will be able to compare LCA with related models; interpret LCA output and make conclusions from it; understand the limitations of traditional LCA; and employ extensions of LCA to include covariates, parameter constraints, and distal outcomes.

## Requirements

Experience with latent modeling is not required, however knowledge of generalized linear regression modeling and categorical data analysis is recommended. Some familiarity with SAS or R may be an asset, but is not required

## About the Instructor

Brenden Dufault, MSc, is a full-time biostatistical consultant with the George and Fay Yee Centre for Healthcare Innovation with degrees in statistics and epidemiology. He has experience with the design and analysis of studies in clinical medicine, microbiology, immunology, public health, nursing, and psychology. Although a generalist, some of his specializations include mixed-effects models, latent mixture models, and high-dimensional data.

## Registration Information:

\$50 course fee. Space is limited. Registration deadline: **October 21, 2018.**

To register for this course, visit <https://chimb.ca/events/Latent-Class-Analysis>

For more information, please email [DataScience@chimb.ca](mailto:DataScience@chimb.ca).

### Registration Cancellation Policy:

A registration refund will be made upon written request on or before October 21, 2018. A \$35 administrative fee will be retained. No refunds will be made for cancellations after this date.