THE CHINESE UNIVERSITY OF HONG KONG

Department of Statistics

will present a seminar entitled

Extended Latent Class Models and Developmental Trajectory Analysis

by

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on

Friday, 24 November 2006
11:00am – 12:00 noon

in

Lady Shaw Building C2
The Chinese University of Hong Kong

Abstract:

The focus of this presentation is on the development of clinically interpretable latent class analysis in the context of health data analysis. Latent class models (LCM) have been increasingly used for analyzing health data, partly because their interpretations conform to a physician's conceptual model of disease conditions and health status, and partly because outcomes of interest to clinical researcher are often multidimensional. There exist a number of hurdles that limit the widespread application of LCM. We highlight three issues – (1) an interpretation-versus-misspecification dilemma, (2) monotonically ordered classes, and (3) possible transition between classes over time, and propose possible solutions to these problems. In this talk, we will illustrate how we address these issues by using GEE-based method, hidden Markov model, functional principal component analysis and clustering algorithms.

This is a joint work with Beth Reboussin, WFUSM, and Frank Rijmen, VU University Medical Center, the Netherlands.

All are Welcome