DEPARTMENT OF STATISTICS AND ACTUARIAL SCIENCE
THE UNIVERSITY OF HONG KONG

Seminar

Professor LI Gang

Professor of Biostatistics and Biomathematics
Director, UCLA's Jonsson Comprehensive Cancer Center BASE Unit
University of California at Los Angeles
Los Angeles, California, USA

will give a talk

entitled

ON THE PREDICTIVE POWER OF A NONLINEAR MODEL

Abstract

The R-squared statistic, or coefficient of determination, is commonly used to measure the predictive power of a linear model. It is interpreted as the fraction of variation in the response explained by the predictors. Despite its popularity, a direct equivalent measure is not available for nonlinear regression models and for right-censored time-to-event data. In this talk, I will show that in addition to a measure of explained variation, another measure of explained prediction error is required to assess the predictive power of a nonlinear model. The measures are well defined even for a mis-specified model. I will discuss how to extend these measures to right censored time-to-event data and illustrate the methodology using simulated and real data examples.

on

Tuesday, January 26, 2016

(Refreshments will be served from 10:15 a.m. <u>outside Room 301 Run Run Shaw Building</u>)

10:30 a.m. – 11:30 a.m.

at

Room 301, Run Run Shaw Building

<u>Visitors Please Note</u> that the University has limited parking space. If you are driving please call the Department at 3917 2466 for parking arrangement.

All interested are welcome