



**Department of Mathematics, Statistics and Computer
Science**

St. Francis Xavier University

Presents

Multiple Linear Regression Model

By

Dr. Md. Shakhawat Hossain

Post-Doctoral Fellow

Department of Public Health Services

University of Alberta

Monday, November 3rd, 2008 @ 2:15 in AX23A

Multiple linear regression analysis is widely used in many scientific fields, including public health, to evaluate how an outcome or response variable is related to a set of covariates. As a result, statistician often needs to assess relative importance of a covariate by comparing the contributions made by other individual covariates in a particular regression model. In this seminar, I will discuss the least squares method with matrix notations for estimating the regression parameters. Assessing goodness of fit, model assumptions, analysis of variance and hypothesis testing of regression parameters will be discussed in this seminar. A real data example will be used to illustrate the goodness of fit, assumptions, testing etc.

Refreshments will be served before the talk in AX24A