McMASTER UNIVERSITY

GRADUATE PROGRAM IN STATISTICS

STATISTICS SEMINAR

Speaker: Dr. Tulay Koru-Sengul
Department of Clinical Epidemiology and Biostatistics
McMaster University

Title: Handling Missing Values
Day: Tuesday, October 30, 2007

Time: 3:30 - 4:30 PM

Place: HH/217 - Deloitte Colloquium Room
(refreshments in HH/216 at 3:00 PM)

SUMMARY

Researchers are frequently faced with the problem of analyzing data with missing values. Missing values are practically unavoidable in studies especially in medicine and incomplete data sets make the statistical analyses very difficult. In my talk I will discuss the missing-data problem, implications of missing values for data analysis and interpretation. I will describe different patterns of missingness, missing data mechanisms and their implications for data analysis. Various methodologies for simple and advanced approaches for handling missing data will be reviewed by focusing on their advantages and disadvantages in the analysis. I will also offer some advice on handling missing values in the analysis.

ABOUT THE SPEAKER

Dr. Tulay Koru-Sengul is an assistant professor of biostatistics in the Department of Clinical Epidemiology and Biostatistics at McMaster University and a Faculty Biostatistician at the Clinical Trials Methodology Group of Ontario Clinical Oncology Group at the Henderson Research Center. She is an experienced statistician and trial methodologist who joined at McMaster University and the Henderson Research Center in 2006. Prior to joining McMaster Dr. Koru-Sengul held faculty appointments at the State University of New York at Buffalo and the University of Saskatchewan. She also has several years of experience working as a biostatistician at a number of medical schools in the United States.

Dr. Tulay Koru-Sengul's primary research interests lie in the development and application of statistical methods for biological responses that vary in time and occasion. Her biostatistical research areas include: analysis of longitudinal responses in the presence of missing data, joint modelling of longitudinal responses and event process.

Her doctoral dissertation in statistics addresses the issues and the solutions on the missing data problem for longitudinal studies in general. She developed a new modeling approach and a methodology to handle missing values to analyze longitudinal studies. She has experience on designing, planning, analyzing, and reporting on the application of variety of statistical models especially in medicine. Her publications and conference presentations include her methodological work in statistics as well as her collaborative work in various fields in medicine.

She is currently collaborating with researchers whose interest is cancer, clinical thromboembolism, psychiatry, respiratory health, rehabilitation sciences, health service evaluation from Juravinski Cancer Center, Henderson Research Center, Firestone Institute of Respiratory Health at St. Joseph's Health Care in Hamilton, Ontario Clinical Oncology Group, University of Saskatchewan in Canada and University of Pittsburgh in the United States.

MORE SEMINAR INFORMATION

A list of recent and upcoming seminars is available at
`http://www.math.mcmaster.ca/canty/seminars`

For further information please contact Angelo Canty at 905-525-9140 ext. 27079,
email: `cantya@mcmaster.ca`.