Professor T.D. Dwivedi Memorial Lecture

"On Making Valid Statistical Inferences by Combining Data from Multiple Sources"

A talk by

Distinguished Research Prof. J.N.K. Rao
School of Mathematics and Statistics
Carleton University, Ottawa

Date: **Friday, November 16, 2018**

Time: **4:00 p.m. – 5:00 p.m.**

Location: **1400 de Maisonneuve Blvd. West, Montreal**
J.W. McConnell Building/Library Bldg
Room S-LB 646

The talk will be followed by a small reception in room S-LB 921.04

Please RSVP to g.ford@concordia.ca

J.N.K. Rao is a Distinguished Research Professor in the School of Mathematics and Statistics at Carleton University. He is an expert in the area of Survey Sampling, especially in Small Area Estimation. His celebrated book entitled, "*Small Area Estimation*", a Wiley publication, originally published in 2003 has gone into the second edition that has been appreciated by researchers and practical users alike. He received several academic honours including a Fellow of the Royal Society of Canada, a Fellow of the American Statistical Association, and a Fellow of the Institute of Mathematical Statistics. Among his various awards are Honorary Doctorates from the University of Waterloo and the Catholic University of Sacred Heart, Italy, Gold Medal from the Statistical Society of Canada, Waksberg Award in Survey Methodology, and the first Medal in Small Area Estimation, 2017. Various scholarly conferences have been organised in his honour over the past years, the most recent having been held in Kunming, China (May 24 - May 27, 2017) entitled, "*Contemporary Theory and Practice of Survey Sampling: A Celebration of Research Contributions of J.N.K. Rao*".

Abstract: **Survey samplers have long used probability samples from multiple sources in conjunction with census and administrative data to make valid and efficient inferences on population parameters. This topic has received a lot of attention more recently in the context of data from non-probability samples such as web surveys and social media. In this talk, I will discuss some methods, based on models for the non-probability samples, which could lead to useful inferences when combined with probability samples. I will also explain how big data may be used as predictors in small area estimation.**