Eleventh Annual Bahadur Memorial Lectures

The Department of Statistics is proud to present the Eleventh Annual Bahadur Memorial Lectures in honor of Raj Bahadur's fundamental contributions to statistics and to our department.

We are pleased to have Peter Hall, Professor, Department of Mathematics and Statistics, University of Melbourne, Australia, as our honored speaker.

"Modelling the Variability of Rankings"
Monday, November 9, 2009, at 4:00 PM
Eckhart 133, 5734 South University Avenue
Refreshments following the seminar in Eckhart 110

"Contemporary Frontiers in Statistics"
Thursday, November 12, 2009, at 4:00 PM
Eckhart 133, 5734 South University Avenue
Refreshments will be served, before the talk, at 3:15 PM, in Eckhart 110

For further information and about building access for persons with disabilities, please contact Kelly Macias at 773.834.5169 or send email (kmacias@galton.uchicago.edu).
ABSTRACT

For better or for worse, rankings of institutions, such as universities, schools and hospitals, play an important role today in conveying information about relative performance. They inform policy decisions and budgets, and are often reported in the media. While overall rankings can vary markedly over relatively short time periods, it is not unusual to find that the ranks of a small number of "highly performing" institutions remain fixed, even when the data on which the rankings are based are extensively revised, and even when a large number of new institutions are added to the competition. In this talk we endeavour to model this phenomenon. We interpret as a random variable the value of the attribute on which the ranking should ideally be based, and we interpret data as providing a noisy approximation to this variable. We show that, if the distribution of the true attributes is light-tailed (for example, normal or exponential), then the number of institutions whose ranking is correct, even after recalculation using new data and even after many new institutions are added, is essentially fixed. Cases where the number of reliable rankings increases significantly when new institutions are added are those for which the distribution of the true attributes is relatively heavy-tailed.
PETER HALL  
Department of Mathematics and Statistics  
University of Melbourne, Australia

Contemporary Frontiers in Statistics

THURSDAY, November 12, 2009, at 4:00 PM  
133 Eckhart Hall, 5734 S. University Avenue  
Refreshments will be served, before the talk, at 3:15 PM, in Eckhart 110.

ABSTRACT

The availability of powerful computing equipment has had a dramatic impact on statistical methods and thinking, changing forever the way data are analysed. New data types, larger quantities of data, and new classes of research problem are all motivating new statistical methods. We shall give examples of each of these issues, and discuss the current and future directions of frontier problems in statistics.