



**BIG DATA**

# Interdisciplinary Data Sciences



\* IDSC Seminar Series \*

**March 9, 2016 1:00-2:00pm**

**Location: CUTR 202**

**Presents**

**Dr. Sat Gupta**

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University of North Carolina – Greensboro**  
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**Title: Improved Estimators of Mean of Sensitive Variables using  
Optional RRT Models**

**Abstract:** Respondent privacy is an important issue in sample surveys, more so when dealing with sensitive topics where social desirability response bias is a major worry. Randomized response models (RRT Models) are important tools to deal with these problems. In this talk, we will discuss some applications of RRT models, and present some estimators that are more efficient than the usual RRT mean estimators. We will also present simulation results to validate theoretical findings.



**Biography:** Sat Gupta is a Professor of Statistics and Associate Head in the Department of Mathematics and Statistics at The University of North Carolina – Greensboro. He earned a PhD degree in Mathematics from University of Delhi (1977) and a PhD degree in Statistics from Colorado State University (1987). He has held faculty positions at University of Delhi (1976-1982), University of Southern Maine (1986 – 2004), and University of North Carolina – Greensboro (2004 – Present). He has to his credit over 100 refereed journal articles, over 100 research talks, and 5 edited book volumes. He has guided student research at all levels of the curriculum from undergraduate to PhD level. He serves as the General Chair for the important biennial international conference “International Conference on Advances in Interdisciplinary Statistics and Combinatorics - <http://www.uncg.edu/mat/aisc/2014/index.html>”. He is also the founding editor of the *Journal of Statistical Theory and Practice*, a Taylor and Francis Journal (<http://www.tandfonline.com/loi/UJSP20>). He has received funding from agencies like the National Science Foundation, National Institute of Health, and the Mathematical Association of America. He has provided statistical consulting to researchers from many disciplines such as Anthropology, Biology, Marine Biology, Education, Medicine, Nursing, Public Health, and Nutrition. He has also provided consulting to many off-campus clients and has testified in many court cases as an expert witness. More detailed information about Professor Gupta is available at his personal webpage <http://www.uncg.edu/mat/faculty/sngupta/>.

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